



# My Diabetes Learning Path

This program helps you personalize your learning needs at your own pace. It allows you to choose the information you need—from useful tips on healthy eating, being active, taking medicine, and staying on track—to support the diabetes management goals that you work with your healthcare professional to set.



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- ▶ Healthy Eating: Portion-Size Awareness
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- ▶ Understanding Tests for Diabetes Management

# Eating Modules List

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▶ **Healthy Eating: Plate Method**

▶ **Healthy Eating: Portion-Size Awareness**

▶ **Reading a Nutrition Facts Label**

# Moving Modules List

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▶ **Long-Acting Insulin**

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Managing Diabetes**

# Staying On Track Modules List

▶ **Cardiovascular Risk and Protection**

▶ **Changing Behavior**

▶ **Checking Blood Glucose and A1C**

▶ **Creating a Plan You Can Stick With**

▶ **Coping with Stress**

▶ **Finding Support**

▶ **Identifying Your Goals and Motivation**

▶ **Sick Days**

▶ **Staying Motivated**

▶ **The Emotional Side of Diabetes**

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# Dealing with Challenges to Eating Healthy

Eating healthy can present challenges for many of us. Maybe you were at a party and were faced with all sorts of yummy temptations. Or you had a bad day and thought rewarding yourself with food was the answer. Sound familiar? No problem. **I-SEEK** is a way to learn about yourself that may also help you understand your own barriers to eating healthy.

## Key Points

- I-SEEK is an acronym that stands for **I**mportance, **S**upport, **E**xpense, **E**nvironment, and **K**nowledge.
- The I-SEEK system can help you break through barriers and take steps toward healthier eating.
- The more specific and personal you make each of the I-SEEK steps, the better it can help you get on the road to success.

## What You Need to Know:

Let's look at each of the I-SEEK segments and how you can make this work for you.

### • IMPORTANCE

- Write the reasons why healthy eating is important to you. The more personal you can make these reasons, the more inspired and motivated you may feel.
- Here are some examples to get you started:
  - My family is concerned about my health. I want them to see that I am doing my best to make healthy changes.
  - I've cared for everyone else in my family and now, it's my turn to do what I can to live a long, healthy life.

### • SUPPORT

- Surround yourself with friends and family, and let them know how they can help support you in your effort to eating healthy.
- Ban negative self-talk and focus on all the things you CAN do. Instead of saying or thinking, "I won't be able to stick to this diet," give yourself words of encouragement.
- Need help supporting your efforts? There are many online communities that can help.

### • EXPENSE

- Healthy eating doesn't have to cost more. Some groceries offer a free service of a dietitian to help you select healthier options. Here are a few tips that may help:
  - Write a shopping list and buy only what's on your list. You may want to consider downloading a grocery list app.
  - Bring lunch and snacks with you. This will not only help control what you eat but may help you save money having to buy them.
  - Using frozen fruits and vegetables is usually just as nutritious. Plus, unlike fresh produce, you can buy and store them when they're on sale.

### • ENVIRONMENT

- Limit the triggers and cues in your food environment—at home or place of work—that trigger you to eat more.
- Keep tempting foods out of sight and put healthier foods within easy reach.
- Eat from smaller plates and bowls.
- Addressing food temptations—at home or on the road—is an important step toward healthier eating.

### • KNOWLEDGE

- Learn about your own eating habits and what triggers you to go off course. This can help you understand and overcome these barriers to healthy eating.
- Do junk food snacks seem to call your name late at night when you're alone or watching TV? Fill up a container with cut up fresh vegetables to grab-and-go, and munch on them instead. Or pour yourself a soothing cup of hot tea. Trade in your less healthy snacking habits for healthy ones.
- Bringing snacks to work can help you avoid the donuts in the break room or your coworker's candy jar.



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## Helpful Tip:

Focus on all the delicious healthy foods that you can eat instead of what you can't. Make a list of foods you enjoy that are both healthy and nutritious. Keep them stocked and within easy reach. Get more helpful tips for eating healthy foods [here](#).

## Myths vs Facts

**Myth:** You have to be wealthy to truly eat healthy.

**Fact:** You can eat healthy in a budget-friendly way. For example, frozen fruits and vegetables can be bought on sale and stored for months. Visit a local farmer's market for fresh produce that is often less expensive than the grocery stores.

<https://diabeteseducation.novocare.com/healthy-eating/where-healthy-meets-delicious.html>

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
Write an inspirational statement of why healthy eating is important to me.

**Why It Matters**  
Putting something in writing helps make it real.

**2 Action**  
Eat a vegetable salad before having a meal.

**Why It Matters**  
This not only encourages you to eat more veggies, but helps you fill up so that you eat less high-calorie foods.

**3 Action**  
I will organize my pantry shelves and refrigerator so the healthy food is more visible and the less healthy food is out of sight.

**Why It Matters**  
If healthy foods are more visible, you may be more likely to eat them.

**4 Action**  
I will choose someone on my diabetes care team to be my support person and help me stick with my plan.

**Why It Matters**  
Having ongoing support is linked with successfully changing behavior over time.

# Healthy Eating: The Plate Method

Making healthy food choices and planning meals in advance may help you manage your type 2 diabetes—and even your weight. In this topic, we'll explore the Plate Method, an easy and effective way to make healthy food decisions, eat reasonably sized portions, and help manage your blood glucose. Best of all, you don't ever have to count calories! Not a single one.

## Key Points

- The American Diabetes Association (ADA) recommends using your plate to create healthy meals. The Plate Method is a simple way to manage portion sizes and eat balanced meals. Even people without diabetes can benefit from eating in this healthy way, so get your family and friends on board too.
- Using this method helps you find the right amount of food to eat without measuring or counting carbs or calories.
- You'll be able to enjoy a healthy variety of foods. Your dietitian can provide additional help in selecting the best foods for you.
- Be sure to also have a cup on hand so that you can include 8 ounces of water or low- or non-fat milk with your meal. It can also be used to help you add fresh berries or other fruit to each meal.



## What You Need to Know:

- **Get a 9-inch plate.** A smaller plate will help you lose weight by controlling how much you eat. A packed 9-inch plate may even trick the eye into thinking you're eating lots more than you are. Choose whole foods as much as possible. Eating too many processed foods is linked to extra calories and weight gain. Make healthy swaps by choosing more whole grains, fruits, and veggies instead of ultra-processed convenience foods that are often made with refined grains and added sugars, salt, and fat.
- **Divide your plate in half.** Fill half your plate with non-starchy vegetables. Some common ones include asparagus, green beans, beets, Brussels sprouts, broccoli, carrots, cauliflower, spinach, tomatoes, peppers—and the list goes on. A colorful variety of veggies will brighten your plate and maybe even your mood.
  - If you're creating a plate for breakfast, leave this section empty.
- **Divide the other half of your plate into half again.** Now you have two quarters, or three parts, in total on your plate.
  - **Fill one quarter of your plate with starches or whole grains.** For breakfast, this might include oatmeal, whole grain toast, or cold cereal. (If you choose to have cereal for breakfast, use a small bowl that can hold about one cup.) For lunch or dinner, you might choose corn, brown rice, or whole grain bread. Other starches to consider include lentils, peas, pinto, or kidney beans. Some grains to choose from include oats, barley, quinoa, and pasta. Yes, pasta! Just remember to keep your serving to one quarter of your plate.
  - **Fill the other quarter of your plate with a healthy protein.** Foods like chicken, turkey, fish, lean meat, tofu, or eggs give you a wide variety from which to choose.
- **You'll also need to add 1 to 2 teaspoons of a healthy fat.** Olive or canola oil, almonds, cashews, pecans, peanuts, sesame seeds, trans fat-free margarine, olives, nut butter, and avocado all qualify. You may want to drizzle the oil on top of your veggies or sprinkle seeds on top instead. Nut butter or avocado make a delicious complement to the whole grain bread you may have chosen.
- **Be sure to also include fruit, as well as 8 ounces of low-fat milk, yogurt, or a plant-based milk with each meal.** And don't forget to drink water with your meals and throughout the day.

## Helpful Tip:

Remember to choose your beverages carefully, too. Avoid sugary drinks like juices, sodas, and sports drinks, which can raise your blood glucose and add unnecessary calories. Better choices are water, seltzer water, unsweetened tea, and diet zero-calorie drinks. For a spa-like treat, put a pitcher of water with cucumbers, strawberries, and fresh mint in the fridge.

## Myths vs Facts

**Myth:** The Plate Method is a diet for people with diabetes.

**Fact:** The Plate Method is a way to eat healthy that anyone with diabetes can use and enjoy.

Nice work! You've finished reading through the information on this topic.

Next Topic

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will use a smaller plate each evening for dinner.

**Why It Matters**  
Using a smaller plate may help you eat smaller amounts of food.

**2 Action**  
I will plan to eat 2 different types of non-starchy vegetables at dinner every night for the next week.

**Why It Matters**  
Non-starchy vegetables are full of vitamins, minerals, and fiber. They're also low in calories and carbs.

**3 Action**  
I will try a different whole-grain food this week, such as quinoa or wild rice.

**Why It Matters**  
There are a variety of whole-grain foods that can provide added nutrition and interest to your meals.

**4 Action**  
I will make some healthy swaps to reduce the processed foods I use, such as roasted almonds instead of granola bars, or old-fashioned oats instead of ready-to-eat breakfast cereal.

**Why It Matters**  
Research shows that just by swapping out highly processed foods for whole foods you'll save calories and it will likely improve blood glucose.

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# Healthy Eating: Portion-Size Awareness

Eating right, being active, and taking your medicine all play important roles in managing your type 2 diabetes. Losing weight, if you need to, can also help. One of the key elements of weight loss is controlling your food portions. This can help you cut back on calories and carbohydrates (carbs).

With restaurant eating and online ordering so popular, it's no wonder that many of us are confused about what a "healthy" portion looks like. If you think about the enormous bowls of pasta served by most restaurants—which are often enough for 2 or even 3 people—you can understand the confusion.

## Key Points

- Portion control is a key part of managing your diabetes. Eating too much (or too little) of certain foods can affect your blood glucose and your weight.
- The American Diabetes Association (ADA) recommends using your plate to manage portion sizes. The Plate Method is a simple way to do this without measuring food.
- Eating from a smaller plate can make it easier to eat smaller portions.

## What You Need to Know:

- There's a difference between a portion and a serving.
  - **A portion** is the amount of food that you choose to eat. As you know, some of us eat very large portions.
    - The portion size that is appropriate for you may vary from others depending upon your size and level of activity. Your healthcare professional or a dietitian can best advise what an appropriate portion size is for you.
  - **A serving** is a measured amount of food that you see on a Nutrition Facts label. For example, a cereal box label may say that 1 cup of dry cereal equals 1 serving. The nutrition facts information (calories and carbs) is based on the listed serving size.
- Eating a larger than appropriate portion of certain foods can affect your blood glucose levels and your weight. For example, a large bowl of pasta—which is high in carbs— may cause your sugar levels to go up, and the extra calories can cause weight gain over time.
- Years ago, the size of an average dinner plate was between 8 and 9 inches and held about 800 calories. Today, the standard plate is between 10 and 12 inches and holds between 1,000 and 1,900 calories! Is it any wonder so many of us need to lose weight?
- Even if you don't need to lose weight, paying attention to what and how much you're eating—especially the carbs (breads, starches, fruit, and sweets)—will be helpful as you work to keep your blood glucose in target range.
- Measuring cups are great for dry foods, like cereal, pasta, and rice. Liquid measuring cups can help you determine a serving of milk or juice. Use measuring spoons for salad dressing, mayonnaise, and peanut butter. A scale can be used for meats and cheese (in ounces or grams).
- Out to dinner and don't have your measuring tools with you? No problem! You can use your hand to help.
  - One teaspoon = the tip of your thumb. This equals 1 serving of fat, such as butter, margarine, mayonnaise, or oil
  - One tablespoon = your thumb (from the tip to where it meets your palm)
  - One ounce = your index finger is the size of 1 ounce of cheese. One cupped hand, is how to measure nuts or dried fruit and 2 cupped hands will get you an ounce of chips, popcorn, or pretzels
  - One cup = the size of your fist
  - Three ounces = your opened hand—the size of your palm is the perfect way to measure a serving of fish, chicken, turkey, and beef. Your restaurant's 10-ounce juicy steak can provide you 2 extra meals!



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## Helpful Tip:

Start reading the serving sizes on packages of the foods you buy. It'll help you become familiar with what is considered a serving. You may be very surprised. If you're dining out, cut a portion of your meal to eat and ask your server for a container to pack the other half to go.

## Myths vs Facts

**Myth:** It's best to weigh and measure foods before they're cooked.

**Fact:** Foods should always be cooked first and then weighed or measured.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will use measuring cups to determine the appropriate portion size more accurately.

### Why It Matters

Eating more than a single portion can add calories to your plate.

**2 Action**  
I will look at the serving sizes on the Nutrition Facts label for any new or different type of food or beverage that I consume.

### Why It Matters

Paying attention to the serving size on a food item can increase awareness about calorie and carbohydrate intake.

**3 Action**  
I will use a smaller plate, such as a salad plate, for my dinner tonight.

### Why It Matters

Eating from a smaller plate helps reduce portions.

# Reading a Nutrition Facts Label

Knowing how to read and understand a nutrition facts label is important—even if you don't have diabetes. These labels can help you keep track of carbs, fat, and sodium. They also give you information about the percent of your daily value of these things. Reading food labels can help you make healthy choices and better manage your diabetes.

## Key Points

- The serving size is the first thing to review on a food label. It is based on the typical portion of food that is usually eaten. All of the nutrition information on the label (such as calories and grams of carbs) are based on the serving size that is listed. Talk with your healthcare professional to best determine what is right for you.
- The amount of food you eat may be different from the serving size listed. Adjust the numbers on the food label in your calculations based on what you actually eat.
- For most people, looking at the “total carbohydrate” figure is the next most important number to review. Your food plan may be based on a certain amount of carbohydrates at each meal.
- Pay attention to how much fat your food choice contains. Keep saturated fats to no more than a single gram and trans fats to 0 grams per serving.
- Choose foods with at least 3 grams of fiber per serving. These choices can help you feel fuller and eat less.

## What You Need to Know:

There are 5 key areas when reading a nutrition facts label.

- ▶ **Serving size:** Remember that most packages contain more than 1 serving, so be mindful of how much you're choosing to eat and adjust your calculations accordingly.
- ▶ **Saturated fat:** This is the unhealthy type of fat, which may raise your bad cholesterol or what is referred to as LDL-cholesterol (low-density lipoprotein). This is different than HDL-cholesterol (high-density lipoprotein), which is considered good. Try to choose foods that contain no more than 1 gram of saturated fat per serving.
- ▶ **Trans fat:** This is another kind of unhealthy fat, which can also raise your bad cholesterol. For this reason, look for foods that contain “0 grams” of trans fat.
- ▶ **Sodium:** Just because a food doesn't taste salty doesn't mean it's low in sodium. Low-sodium foods have no more than 140 mg of sodium per serving. High-sodium foods include canned foods, luncheon meats, and processed foods.
- ▶ **Total carbohydrates:** This figure combines 2 kinds of carbs—dietary fiber and sugars. Carbs raise blood glucose more than protein or fat. It's important to look at the total amount of carbs in a serving and not just the amount of sugar. Soluble fiber has little effect on blood glucose but can help keep your digestive tract working smoothly. It can also help you feel fuller. Choose foods with at least 3 grams of fiber per serving. It's important to know that carbs raise blood glucose even more than protein or fat.

Nutrition Facts	
8 servings per container	
<b>Serving size</b>	<b>1/2 cup (55 g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>230</b>
	<b>% Daily Value*</b>
<b>Total Fat</b> 8 g	<b>10%</b>
Saturated Fat 1 g	<b>5%</b>
Trans Fat 0 g	
<b>Cholesterol</b> 0 mg	<b>0%</b>
<b>Sodium</b> 160 mg	<b>7%</b>
<b>Total Carbohydrate</b> 37 g	<b>13%</b>
Dietary Fiber 4 g	<b>14%</b>
Total Sugars 12 g	
Includes 10 g Added Sugars	<b>20%</b>
<b>Protein</b> 3 g	
Vitamin D 2 mg	10%
Calcium 260 mg	20%
Iron 8 mg	45%
Potassium 235 mg	6%

\* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

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## Helpful Tip:

Pay close attention to the serving size listed on the label. It may be a lot smaller than the portion sizes you've been eating. Use measuring cups and spoons as well as food scales to check your servings from time to time.

## Myths vs Facts

- Myth:** The only benefit of eating foods that are high in fiber is for your digestion.
- Fact:** Fiber helps you feel fuller, which may help you eat less. It also has benefits to helping keep blood glucose and blood fats closer to target range.

Nice work! You've finished reading through the information on this topic.

Next Topic



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will look at the food labels on at least 3 items in my cabinets or pantry and note the 5 important areas.  
**Why It Matters**  
Checking labels may help you learn what to look for to make healthy decisions about what and how much to eat.
- 2 Action**  
Next time I'm at the grocery, I will compare labels on 2 similar food items. After noting the differences, I can then decide which is the better choice.  
**Why It Matters**  
Comparing labels on similar products may help you learn to select healthier options.

- 3 Action**  
I will practice my measuring skills for one day this week, weighing and measuring out all my food portions.  
**Why It Matters**  
Being aware of your portions will help you better manage how much you eat and have more accurate calculations of calories and of carbohydrates—which may affect blood glucose.

# Dealing with Challenges to Living a More Active Life

Trying to live a more active life with type 2 diabetes can have its challenges. You may feel self-conscious after periods of inactivity or wonder where you might find the time. Maybe you're concerned about your ability to stick with it once you start. Whatever challenges you think may get in your way, this topic may help you overcome them.

## Key Points

- Before starting any activity program, talk with your healthcare professional. Ask about your risk for low blood glucose from increased activity. They may want to do a few routine tests before letting you get started. Checking your blood pressure, arranging for a stress test to see how well your heart is working, even checking your eyes and feet for possible nerve damage are just some possible tests.
- Encourage yourself to get up and move. Consider rewarding yourself for your improved behavior. The promise of a monthly massage might be just the reward you need to become more active.
- Having an activities partner can help make living an active lifestyle more than just healthy, but social too.

## What You Need to Know:

Let's start by looking at some common barriers to being active and suggestions for ways to deal with them.

- **"I don't have the time to add activities to my life."**
  - Schedule activity time the way you would any other important appointment that you need to keep.
  - Make it a ritual at a set time each day.
  - Break up your activity into shorter sessions. Remember, three 10-minute sessions are just as beneficial as one 30-minute session.
- **"I don't like to be active alone."**
  - Ask a friend, neighbor, or family member to go for a walk with you.
  - Try a class. It's a great way to meet people.
  - Join a gardening or walking club.
- **"I'm afraid of having low blood glucose or hurting myself."**
  - Discuss your activity plan and your concerns with your healthcare professional.
  - Check your blood glucose before your activity. Eat a small snack, if needed.
  - Start slowly and stop if you feel any pain.
- **"I'm too tired to be active."**
  - Having more energy is one of the benefits of physical activity.
  - Start with a few minutes of activity and gradually increase your time by a few minutes every few days.
  - Be active at the time of day when you have the most energy.
- **"I have neuropathy (pain) in my legs and feet."**
  - Try a low-impact activity like swimming, a rowing machine, or chair activities.



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## Helpful Tip:

Counting your steps using your smartphone, an app, or a fitness tracker is a great way to encourage you to get moving and keep moving. Establish a baseline of what your usual step count is before setting an unrealistic goal for yourself. Consider making this a friendly competition with your spouse or friends. The one who added the most steps at the end of the week, wins!

## Myths vs Facts

**Myth:** I've never been active and it's too late to start now.

**Fact:** It's never too late to become active. Anyone, at any age, can do some type of physical activity and benefit from it.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic** ▶

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will set aside 10 to 15 minutes each morning and 10 to 15 minutes each evening to do some type of physical activity.

### Why It Matters

You might feel like you don't have time to be active, but you probably do. Remember that you don't have to do all of your activity at one time. It's okay to split it up.

**2 Action**  
I will talk with my healthcare professional about ways to prevent low blood glucose after being active.

### Why It Matters

Low blood glucose can make it difficult to stay active but there are ways to prevent it.

**3 Action**  
I will ask a friend to go walking with me.

### Why It Matters

Being active with someone else may make it more likely that you'll stick with a routine.

# Getting Started with an Active Lifestyle

Getting and staying active is an important part of managing diabetes. Even if you've never been very active, it's easy to find ways to add physical activity to your day. Taking a walk with a friend, lifting light weights, even dancing are just a few ideas.

## Key Points

- Before starting any activity program, talk with your healthcare professional. They can best advise you about the activities that are right for you.
  - They may want to do a few routine tests before letting you get started. Checking your blood pressure, arranging for a stress test to see how well your heart is working, even checking your eyes and feet for possible nerve damage are just some possible tests.
  - They can also tell you if you're at higher risk for low blood glucose from increased activity based on your diabetes medicine.
- Physical activity can have a lot of health benefits. It can help control your blood glucose levels, lower your blood pressure, improve cholesterol levels, and lots more.
- Even everyday activities can count. You may be surprised to learn that vacuuming, gardening, even climbing the stairs are ways to help keep you active.



## What You Need to Know:

- Start slowly—even doing 5 or 10 minutes a day can help. Try to build up to doing at least 30 minutes of physical activity at least 5 days a week. You can break it up and do 10 minutes of activity in the morning, 10 more in the afternoon, and 10 minutes in the evening.
- Try to include all 3 types of physical activity into your routine.
  - **Aerobic exercise** can help improve your overall fitness and strengthen your heart. Some examples include taking a brisk walk, swimming, riding a bike, even dancing.
  - **Resistance training** strengthens and builds muscle, which can help you burn more calories. Try lifting weights, using resistance bands, or the weight machines at the gym. Remember to start with light weights and slowly add more.
  - **Flexibility training** can help improve the range of motion in your joints, help keep you limber, and relieve muscle stiffness. Yoga is a popular example of flexibility training.
- Want to continue to improve your blood glucose and fitness? Try to consistently be active at least 5 days a week for 30 minutes a day. If you want to lose weight, increase that to 6 days a week and for 60 to 90 minutes each day. Don't forget—it's okay to break up your activities into several 10-minute sessions a day as you increase your activity level.

### Helpful Tip:

If you can't talk during your activity, you're working too hard. Stop exercising and seek medical help if you're in pain or don't feel well during exercise.

### Myths vs Facts

**Myth:** Doing housework doesn't count as physical activity.

**Fact:** Yes, it does! In fact, this might make you look at raking leaves, carrying laundry up and down the stairs, and vacuuming in a whole new light.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
Make sure that I have footwear that provides support and comfort for my physical activity.

#### Why It Matters

Wearing the right kind of footwear for physical activity is important. This is especially true if you have poor circulation or nerve damage in your feet and may not be able to sense or feel an injury.

**2 Action**  
Take a 10-minute lunchtime walk for 3 to 5 days this week.

#### Why It Matters

Getting started can be the hardest part but knowing that you only have to do it for 10 minutes may make it easier. This can add up and help you achieve a goal of 150 minutes each week.

**3 Action**  
I will check my blood glucose before and after I am active twice a week.

#### Why It Matters

Your diabetes medicine may put you at higher risk of low blood glucose when you are active. Reduce your risk of lows by checking blood glucose and having a small snack, if needed. Even if you're not at risk for going too low, checking before and after activity can show you the powerful impact activity can have on reducing blood glucose!

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- ▶ Making an Activity Plan Part of Your Routine

# Making an Activity Plan Part of Your Routine

Whether you have diabetes or not, it's always smart to check with your healthcare professional before starting any new physical activity. Do you find sticking with an activity or exercise routine to be hard? You're not alone! It may help to think about the reasons you have for being active and different ways to fit physical activities into your life.

There are many benefits to exercise, including: lowering blood glucose, blood pressure, and cholesterol; improving your heart health; burning calories to help manage your weight; lowering stress, and improving sleep.

## Key Points

- Think about what's motivating you to want to be physically active and what gets in the way.
- Start slow and build on your success.
- Schedule time on your calendar for physical activity.
- Schedule time with a companion to go for a walk. It may help you stay on track.
- Track your progress and reward yourself with new exercise clothing or comfortable shoes.

## What You Need to Know:

- Think about the benefits you will gain by being more physically active. Write down your goals. This may help remind you when you're feeling less motivated.
- Start off with something you know you can do and build upon it. Small steps can add up. Plus, feeling successful is a great way to keep motivated.
- Schedule time for physical activity and mark it on your calendar or in your smartphone. Make it a priority, much like taking your medicine or checking your blood glucose. Aim to be physically active 5 times a week.
- Being active for three 10-minute sessions each day has the same benefits as one 30-minute timeframe.
- There are benefits to all kinds of activities: aerobic (like brisk walking), strength building (using weights or resistance bands), and gentle stretching. Aim to do all three.
- Shake up your routine to keep you interested. Consider signing up for a yoga or dance class; group activities can be fun. Try some online exercises from the comfort of your home. If you enjoy taking walks, try a different route.
- Track your progress. Try using a pedometer or fitness app. Or, simply mark how you're progressing in the same place you track your blood glucose levels. This will all help to reinforce how hard you're working.



**Dealing with Challenges to Living a More Active Life**

**Getting Started with an Active Lifestyle**

**Making an Activity Plan Part of Your Routine**

## Helpful Tip:

Reward yourself for being active. Maybe put a dollar in a jar after each activity you do. Then, buy yourself a present once the jar is filled. Maybe even a new pair of athletic shoes.

## Myths vs Facts

**Myth:** Walking every day is the best way for me to get and stay active.

**Fact:** While walking is great, you may want to mix up your activities. Trying new and different ways of being active can be fun. It can also help you stay motivated.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will identify 3 reasons why being physically active may be important for my health.

### Why It Matters

If you recognize why being active is important, this can help keep you focused and motivated.

**2 Action**  
I will put a set of hand weights or a resistance band near the television.

### Why It Matters

Exercising while you watch TV is a great way to fit physical activity into your day.

**3 Action**  
I will track my activity for 5 days this week to see how many steps I take.

### Why It Matters

Using a fitness tracker to track activity may help you see the progress you're making.



# Diabetes Pills

In addition to eating healthy foods and physical activity, there are a wide variety of non-insulin options for treating diabetes. This module will give you an overview of some of the most common diabetes pills your healthcare professional may prescribe.

## Key Points

There are many kinds of diabetes pills that work in different ways. It is important to know the name of your diabetes medicine, how it works, how it is taken, the reason you take it, and possible side effects. It is common to take more than one kind of diabetes pill at once.

## What You Need to Know

- **Metformin** helps to keep the liver from making too much glucose.
- **Sodium-glucose co-transporter 2 or SGLT2 inhibitors** help the kidneys to get rid of extra sugar in the body through the urine.
- **DPP-4 inhibitors** help prevent the breakdown of GLP-1, a hormone produced in the intestines.
- **Thiazolidinediones or TZDs** help improve the liver, muscle, and fat cells' response to insulin, meaning more sugar leaves the blood and enters the muscles and fat (where it belongs).
- **Sulfonylureas** help the pancreas to release more insulin.
- **Alpha-glucosidase inhibitors** slow down the digestion of carbohydrates and keep the body from absorbing sugar.
- **Combinations pills** contain medicines that work together. Since the different kinds of diabetes pills help lower blood glucose in different ways, some may be used together. These options allow healthcare professionals to come up with treatment plans that meet individual needs.



▶ Diabetes Pills

▶ Why Your Medicines May Change

▶ Concerns About Taking Medicine by Injection

▶ Fitting Injections Into Your Daily Routine

▶ Non-Insulin Injectables

▶ Long-Acting Insulin

▶ Mealtime Insulin

▶ Treating Low Blood Glucose

▶ Technology and Managing Diabetes

## Helpful Tip:

Whenever you start a new medicine, it is important to follow up with your healthcare professional to make sure it's the right medicine and/or the right dose for you. This is nothing to be concerned about and is more common than you may think.

## Myths vs Facts

**Myth:** If I need to take additional medicines for my diabetes it means that I'm getting worse.

**Fact:** Adding a new medicine should not be a cause for concern. It simply means that you may benefit from having a little extra help managing your blood glucose levels, not that you are doing something wrong.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will monitor my blood glucose levels as recommended by my healthcare professional, and track and share them during my next visit.

**Why It Matters**  
Seeing patterns in your blood glucose levels can help your healthcare professional determine if your medicine needs to be adjusted.

**2 Action**  
I will take my medicine(s) as directed.

**Why It Matters**  
It is important to take your medicine(s) as you've been directed. This is the best way to help ensure your blood glucose levels stay on track.

**3 Action**  
I will keep my diabetes support team up to date about how they can be of help.

**Why It Matters**  
Your diabetes support team is there to help, but they can only help you if they know the areas in which you may need their support.

# Why Your Medicines May Change

You may be doing all that you can to help manage your type 2 diabetes: staying active, following a healthy diet, and checking your blood glucose regularly. Then your healthcare professional tells you that they're prescribing another medicine to help get your blood glucose levels and A1C in target range.

This new medicine might be another pill or it might be something that needs to be injected. Don't worry. This is normal and does not mean you have done something wrong. In fact, just as your diabetes may change over time, your medicines may need to change along with it.



## Key Points

- When you have type 2 diabetes, your body either doesn't make enough insulin or it doesn't respond to the insulin it makes as well as it should. This is why your blood glucose levels may rise.
- Your A1C levels, which are determined by a blood test, provide you and your healthcare professional with the average of your blood glucose levels over the past 2 to 3 months. If these levels are above your target level, it may signal the need for additional medicine.
- When you're given a new medicine, you will need to check your blood glucose at home more often. Your healthcare professional will recheck your A1C levels in about 3 to 6 months. This helps them see how well the new medicine is working for you and if any adjustments need to be made.

## What You Need to Know:

Here are some common ones other people with type 2 diabetes have shared.

- Your type 2 diabetes may change over time. In fact, this is common.
- Many people with type 2 diabetes take pills. The first line of therapy for type 2 diabetes generally includes metformin and comprehensive lifestyle changes. Metformin works to help the body make more insulin or better use the insulin that is already produced. Some people who have diseases in addition to diabetes and/or individual treatment or management needs may also have to take insulin or other types of medicines to keep blood glucose in target range.
- Each class or type of diabetes medicine works in a different way. Trying a different medicine may target a different part of the body and it may produce better results.
- It's important to let your healthcare professional know if you have any trouble taking or affording your medicine—or if you need help remembering to take it or get refills.
- Physical activity and healthy eating are important, but may not be enough to keep your blood glucose levels in range—even if you're taking metformin.

### Helpful Tip:

Watching what you eat and your portions, as well as getting and staying active, are ways to help you manage your diabetes. While diet and exercise are often not enough to keep your blood glucose levels controlled, they do play an important role.

### Myths vs Facts

**Myth:** If I'm taking medicine for my diabetes, I can eat whatever I want.

**Fact:** Healthy eating is still important as it plays a key role in your blood glucose, weight, blood pressure, and cholesterol.

Nice work! You've finished reading through the information on this topic.

Next Topic

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will learn how my injectable medicine works.

#### Why It Matters

Understanding how your medicine works and how it can help your diabetes could make you more motivated to take it.

**2 Action**  
I will take my medicine as directed by my healthcare professional.

#### Why It Matters

Taking your diabetes medicine is an important part of managing your diabetes.

**3 Action**  
I will check my blood glucose more often to see how the medicine is working.

#### Why It Matters

Some medicines (such as insulin) may increase the risk for low blood glucose (hypoglycemia).

Diabetes Pills

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# Concerns About Taking Medicine by Injection

If you've been told that you need to start taking an injectable medicine for your type 2 diabetes, don't worry. That's very common. As your diabetes changes over time, chances are, your medicine will too. This topic is full of helpful information and tips to help you get comfortable with both the idea of injectable medicines and the injection itself.

## Key Points

- Needing an injectable medicine doesn't mean that you did anything wrong. It just means that you need a little extra help to control your blood glucose.
- There are two types of medicine given by injection for diabetes. Insulin (there are different kinds) and non-insulin injectables. They are not the same thing. Know the name of the injectable medicine you've been prescribed, when it works, how to take it, and possible side effects.
- You're not flying solo, so relax. Learn about some tips for taking your medicine that may help to reduce pain or side effects. Your diabetes care and education specialist or nurse can show you what you need to do and know. Your pharmacist can help, too.

## What You Need to Know:

For every worry or concern you may have, there's a way to help manage it. It's important to not hold them inside you—but talk about them. Here are some common ones other people with type 2 diabetes have shared.

- **"I'm afraid of needles and worry that the shots will hurt."**
  - Fear is a common emotion when starting injections. Did you know that the needle used for injectable diabetes medicines is much smaller than the ones used for the flu vaccine? That's true! Sometimes the best way to get over your fear is to get on with taking your first shot. Most people find that it's less painful than testing their blood glucose.
- **"I'm worried about low blood glucose."**
  - Some injectable medicines have a higher risk of low blood glucose than others. Talk with your healthcare professional about having a plan to manage low blood glucose. Knowing what to do if this happens can help you feel more comfortable.
- **"I'm worried about side effects."**
  - All medicines can have side effects. If you're prepared and know what to do, your concerns may lessen. Ask your healthcare professional or pharmacist about the side effects of your diabetes medicine to watch out for, and what to do if you do have any.



## Helpful Tip:

You've got a team of healthcare experts at the ready! Your doctor, nurse, diabetes care and education specialist, and pharmacist are there to help. Don't be afraid to reach out with questions.

## Myths vs Facts

**Myth:** My diabetes must be very bad if I have to start an injectable medicine.

**Fact:** It's normal for your diabetes to change over time. It does not mean that you have done something wrong. Injectable medicines are just another tool that your healthcare professional has to get and keep your blood glucose in target range.

Nice work! You've finished reading through the information on this topic.

Next Topic

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will ask my healthcare professional what side effects may occur and how to manage them.

### Why It Matters

You may feel more comfortable knowing what to do if you experience a side effect. Your healthcare professional can help you manage side effects so that they don't get in the way of your treatment.

**2 Action**  
I will monitor and log my blood glucose, as directed, when starting this new medicine.

### Why It Matters

Monitoring your blood glucose helps you and your healthcare professional know how well the medicine is working, and what adjustments may be needed.

**3 Action**  
I will write down my main concerns about having to start my new medicine and share this with a member of my diabetes care team.

### Why It Matters

Understanding your fears and concerns is the first step to overcoming them. Your diabetes care and education specialist can help put your mind at ease.

- ▶ Diabetes Pills
- ▶ Why Your Medicines May Change
- ▶ Concerns About Taking Medicine by Injection
- ▶ Fitting Injections Into Your Daily Routine
- ▶ Non-Insulin Injectables
- ▶ Long-Acting Insulin
- ▶ Mealtime Insulin
- ▶ Treating Low Blood Glucose
- ▶ Technology and Managing Diabetes

# Fitting Injections into Your Daily Routine

Over time, your diabetes may change, and you may be prescribed an injectable medicine, such as insulin, to help manage your blood glucose. This often makes some people uncomfortable, scared, and even wonder if they've done something wrong. Needing an injectable medicine is not your fault. It's just another way for your healthcare professional to help keep your blood glucose in target range.

## Key Points

- Your diabetes and blood glucose levels will likely change over time, even if you're doing everything right.
- Your diabetes care team can give you tips for making injections less of a burden, so don't be shy about reaching out.
- Letting your friends and family know that you need to take an injectable medicine to help manage your diabetes may help you feel less concerned about taking your medicine during social situations.

## What You Need to Know:

- Most people with diabetes will eventually need more medicine, such as an injectable medicine.
- There are things you can do to make giving yourself injections less of a burden, such as:
  - Practicing on an "injection pillow"—a soft pad that's used just for this purpose. It's worth noting that the needles used with diabetes medications are small in comparison to traditional hypodermic needles.
  - Trying different delivery options for injectable diabetes medicines, such as a vial and syringe, a pump, or a pen.
  - Ask your diabetes care team about finding the delivery option that works for you. For example, there are prefilled disposable pens that you may prefer.
- Talk with your friends and family about your need to take an injectable medicine to help manage your diabetes. This may help lessen your concerns about having to take your injectable medicine in a social situation, like during a family gathering.



### Helpful Tip:

Focus on the positive. Ask your healthcare professional or pharmacist about how your injectable medicine is going to help keep your blood glucose in target range. Reaching your blood glucose goal may lead to benefits that you didn't even realize—such as sleeping better and improved vision. Knowing the benefits and focusing on them, may make things easier.

### Myths vs Facts

**Myth:** Injections are always painful.

**Fact:** There are ways and options to make injections easier, which is why it's important to talk with your diabetes care team. They can give you some helpful tips.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will practice injecting into an injection pillow.

#### Why It Matters

Practicing with an injection pillow can help you learn how to give yourself an injection safely.

**2 Action**  
I will ask my diabetes care team for tips about making injections more routine.

#### Why It Matters

Reaching out to experts always makes sense. They have lots of experience and have learned all sorts of tips they'd be happy to share to make taking your medicine easier.

**3 Action**  
For the next week, I will focus on how taking my injectable medicine is helping me stay healthy.

#### Why It Matters

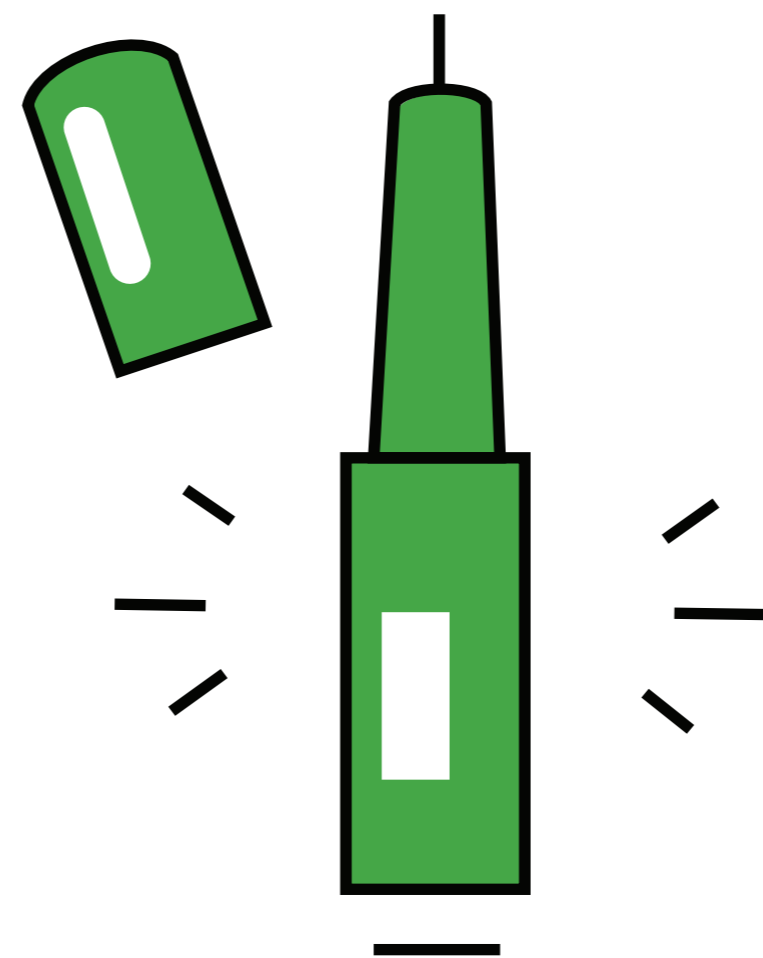
Thinking positively may help you stay on track. It may also help you look at your medicine as an important partner in caring for your health.

- ▶ [Diabetes Pills](#)
- ▶ [Why Your Medicines May Change](#)
- ▶ [Concerns About Taking Medicine by Injection](#)
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# Non-Insulin Injectables

People with type 2 diabetes may not make enough of a hormone called GLP-1 (glucagon-like peptide-1), which is released after eating. GLP-1 receptor agonists (GLP-1 RAs) are medicines that work by replacing what the body isn't producing. There are several kinds of GLP-1 medicines. They can be used alone for treatment of type 2 diabetes or along with other diabetes medicines.

GLP-1 is also available as part of a dual GLP-1/gastric inhibitory peptide (GIP) receptor agonist medicine. Another non-insulin option your healthcare professional may prescribe is an amylin agonist. This is an injectable drug that acts like amylin, a naturally occurring hormone produced by the pancreas.



## Key Points

- GLP-1 receptor agonists are a class of medicines that are usually taken by injection for people with type 2 diabetes. These medicines are not the same as insulin. They help the pancreas make the right amount of insulin at mealtime. They can be very effective in helping to lower A1C and reduce weight, and may lessen risks linked to heart disease.
- An amylin agonist is a medicine taken by injection, and used along with insulin, in people with type 2 diabetes.

## What You Need to Know:

- GLP-1 medicines mimic or copy the action of one of the body's natural hormones—glucagon-like peptide-1. They are also referred to as GLP-1 receptor agonists. There are three ways GLP-1 RAs help keep blood glucose in target range. They:
  - Help the **pancreas** release more insulin after you've eaten
  - Tell the **liver** not to make so much sugar (by releasing glucose) at mealtimes
  - Slow down the movement of food leaving the **stomach** so after-meal blood glucose levels don't go as high
- Most kinds of GLP-1 medicines are "long-acting" and taken with a once-weekly injection. Some are "short-acting" and taken once or twice a day. Talk with your healthcare professional about which kind is right for you.
- An amylin agonist mimics or copies the action of one of the body's natural hormones—amylin. It:
  - Slows the movement of food leaving the stomach so after-meal blood glucose levels don't go as high
  - Tells the liver not to make so much sugar (by releasing glucose) at mealtimes
- An amylin agonist is taken with meals

## Helpful Tip:

The most common side effects of these medicines are gastrointestinal symptoms, mainly nausea. If you experience nausea, be sure to contact your healthcare professional. He or she will offer guidance on ways to manage it, which may include:

- Eat bland, low-fat foods, like crackers, toast, and rice
- Eat foods that contain water, like soups and gelatin
- Avoid lying down after you eat
- Go outdoors for fresh air
- Eat more slowly

## Myths vs Facts

**Myth:** Non-insulin injectable medicines carry the same risk of hypoglycemia (low blood glucose) as insulins.

**Fact:** Non-insulin injectables by themselves have a low risk of hypoglycemia. However, hypoglycemia can become a serious risk if they are taken alongside other medications that lower blood glucose, such as sulfonylureas or insulin. Learn about your risk of having low blood glucose and know how to prevent and treat it if necessary.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will talk with my healthcare professional to learn if non-insulin injectable medicines might be right for me.

### Why It Matters

While there are many benefits to these medicines, there can be some risks if not taken correctly or if your full medical history is now known.

**2 Action**  
If cost is an obstacle to taking non-insulin injectable medicines, I will ask about financial assistance programs that can help.

### Why It Matters

While these medicines can cost more than other diabetes medicines, the benefits can be worth it. Financial assistance programs can help make the medicine affordable.

**2 Action**  
I will monitor my blood glucose and weight regularly and share the information, along with any side effects, with my healthcare professional.

### Why It Matters

Seeing glucose levels going in the right direction can motivate you to stick with your new medication plan. It will also provide information to see if changes in the prescription are needed.

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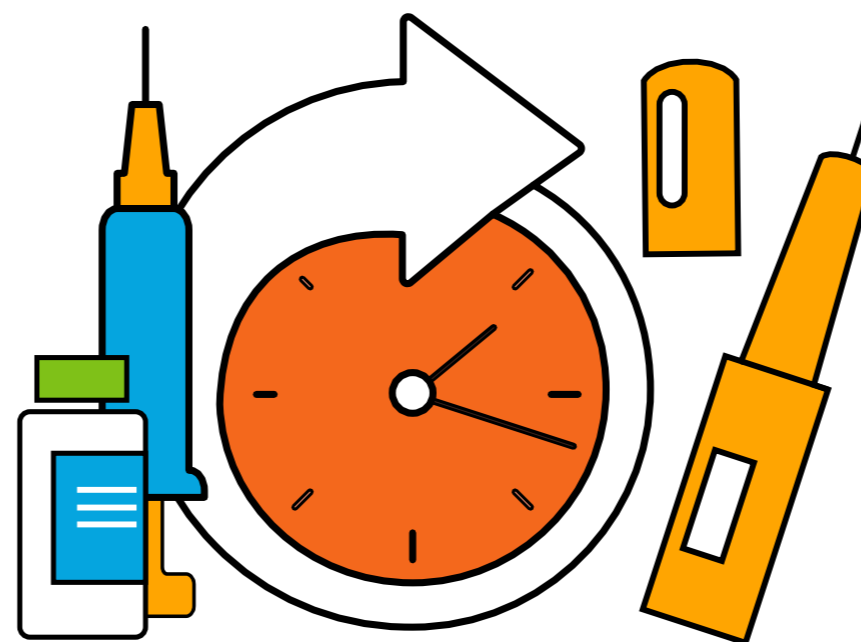
# Long-Acting Insulin

Long-acting insulin, also called background insulin, works to keep blood glucose in target range between meals and during the night. It reaches the bloodstream several hours after injection and tends to lower glucose levels for up to 24 hours.

There are several different kinds of long-acting insulins. It is important to know the specific kind you take and the facts about how it works. This module will help you learn about this important type of insulin.

## Key Points

There are two main types of insulin. One type acts slowly and is called “background” insulin or basal insulin because it works in the background throughout the day and night. The other kind of insulin is called mealtime insulin and is taken before eating.



## What You Need to Know:

- Background insulin is taken once or twice a day at the same time each day. It helps manage blood glucose levels between meals and during the night. It does not need to be taken with food.
- Some background insulin is “long-acting”—meaning it has a duration of action of up to 24 hours and it does not have a peak action time—or a time when it works the hardest. Another kind is called “intermediate-acting” and while it can work for up to 24 hours, it has a peak action time between 4 and 12 hours.
- Often background insulin is taken with another diabetes medicine—either diabetes pills, or a mealtime insulin.
- Premixed insulins are a combination of mealtime and background insulin.
- The recommended dose is different for each person. It is based on several factors including your weight and the level of sugar in your blood.

## Helpful Tip:

- It’s common for your healthcare professional to adjust the dose of your insulin to meet your body’s unique demands. This doesn’t mean there is something wrong. It may just take some time to fine tune your dose to meet your personal needs.
- If using an intermediate-acting insulin (like NPH), a snack may be needed between the lunch and dinner meal to reduce the risk of low blood glucose.
- Long-acting insulin can come in prefilled insulin pens or it can be given using a syringe with a vial of insulin.
- Be sure to refer to the package insert that came with your medicine for instructions on how to store it. Storage information is likely to be on the website for your medicine as well.
- Don’t use insulin that is past its expiration date.

## Myths vs Facts

**Myth:** There is no risk for hypoglycemia (low blood glucose) with long-acting or background insulin.

**Fact:** Long-acting insulin can still lead to hypoglycemia, and risk increases if taken with mealtime insulins or with certain diabetes pills (like sulfonylureas).

## Nice work! You’ve finished reading through the information on this topic.

**Next Topic**

Now you’re ready to act and start incorporating these new healthy habits into your life. This will help you practice what you’ve learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
Discuss any problems you may have taking insulin (including fear, confusion, worry about side effects, remembering to take it or the cost) with my healthcare professional.

### Why It Matters

Learning strategies to help address these barriers can help make taking medicine easier and keep you healthier.

**2 Action**  
Monitor your blood glucose according to the recommended schedule.

### Why It Matters

The best way to know how a new insulin is working is to do home blood glucose monitoring. Monitor more often when starting a new medicine. If blood glucose is usually in target range, it is doing its job,

**3 Action**  
Rotate the sites where injections are given.

### Why It Matters

If injections are always given in the exact same spot, fatty lumps could develop making it harder for the insulin to be absorbed.

[▶ Diabetes Pills](#)

[▶ Why Your Medicines May Change](#)

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# Mealtime Insulin

If you have type 1 diabetes, you need to take insulin. About 50% of people with type 2 diabetes will eventually also need to take insulin. Needing to take insulin doesn't mean your diabetes is getting worse; it just means your pancreas isn't making enough of this blood glucose-lowering hormone. There are several different types of insulins.

In this module, we're going to learn about rapid-acting and short-acting insulins. Rapid-acting insulin acts quickly (in 10 to 30 minutes). It peaks in about 30 minutes to 3 hours after injection and lasts between 3 and 5 hours. Short-acting insulin usually reaches the bloodstream within 30-60 minutes after injection, peaks between 2 and 5 hours after injection, and lasts up to 12 hours.

## Key Points

- Rapid-acting insulin works as quickly as 10 minutes. Short-acting insulin works as quickly as 30 minutes.
- You inject rapid-acting insulin up to 15 minutes before a meal, or short-acting insulin 30 minutes before a meal, which is why they're often called "mealtime insulins."
- Rapid-acting and short-acting insulin work by replacing what your body makes—or should make—naturally.



## What You Need to Know

- Rapid-acting insulin starts to drop your blood glucose level in as soon as 10 minutes, but if your blood glucose is high, you may want to wait longer before eating.
- Rapid-acting insulin is often called, "mealtime insulin" because you take it up to 15 minutes before meals, during, or slightly after a meal.
- Rapid-acting insulin helps manage blood glucose levels after you eat a meal or a snack.
- You may hear your healthcare professional refer to "peak time." This is when the insulin is working its hardest to lower your blood glucose.

### Helpful Tip:

You may need to take a long-acting insulin along with the mealtime insulin your healthcare professional has prescribed. A long-acting insulin helps control your blood glucose levels between meals and during the night and is taken 1 to 2 times a day.

### Myths vs Facts

- Myth:** If you need to take insulin, it means you've done something wrong managing your diabetes.
- Fact:** Needing to take insulin doesn't mean you've done something wrong. It just means your body needs extra help in managing your blood glucose levels.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will make sure to take my rapid-acting insulin up to 15 minutes before a meal or as directed by my healthcare professional.

#### Why It Matters

While rapid-acting insulin starts to work as soon as 10 minutes, if your blood glucose is high, you may want to wait a little longer to eat after injecting.

**2 Action**  
I will not blame myself for needing to take insulin as it doesn't mean I did anything wrong.

#### Why It Matters

Needing to take insulin simply means your body needs a little extra help managing your blood glucose levels for good health. It doesn't mean you failed or did anything wrong.

**3 Action**  
I will talk with my healthcare professional to see if a mealtime insulin is right for me.

#### Why It Matters

Your healthcare professional can best determine if a particular type of medicine is right for you.

▶ [Diabetes Pills](#)

▶ [Why Your Medicines May Change](#)

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# Treating Low Blood Glucose

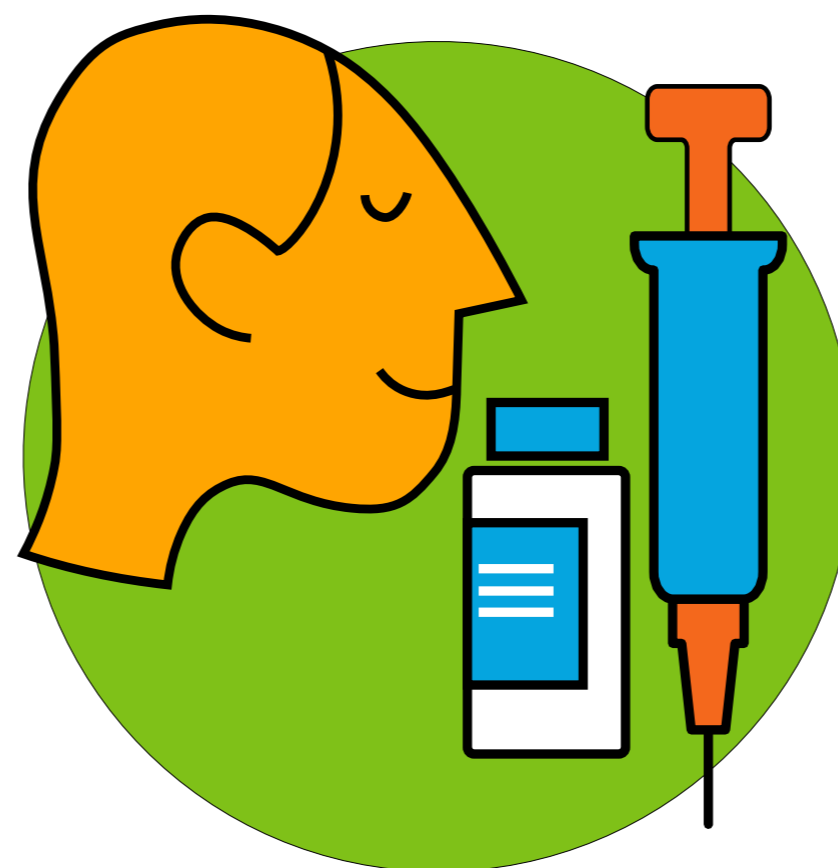
Low blood glucose, also known as hypoglycemia, sometimes happens as you work toward managing your type 2 diabetes with certain pills or insulin. The good news is that it's treatable. But it's important to recognize the symptoms of low blood glucose and know how to treat it effectively.

## Key Points

- Hypoglycemia, or low blood glucose, is a treatable condition.
- If your blood glucose levels fall too low, serious problems can happen—you may fall, have a driving accident, pass out, have a seizure, or worse.
- Being prepared for a low blood glucose event is wise.

## What You Need to Know:

- Low blood glucose is very treatable. It is often a side effect of certain diabetes medicines (insulin and some pills).
- It happens when your blood glucose level falls below 70 mg/dL. If you are experiencing symptoms and are unable to check your blood glucose for any reason, treat the hypoglycemia.
- Some common warning signs of low blood glucose include:
  - Feeling dizzy or shaky
  - Confusion or trouble focusing
  - Blurred vision
  - Feeling weak
  - Irritability before meals
  - Increased hunger
- Low blood glucose may be caused by:
  - Skipping a meal or eating too little food, especially carbohydrates
  - Not having a snack or not adjusting your insulin before being physically active
  - Taking too much medicine or at the wrong time
- If you are able to check your blood glucose with a meter and see that it's low, these are some ways to treat it:
  - Drink a half cup of fruit juice, regular soda (NOT diet), or 8 ounces of skim or low-fat milk.
  - Take 4 glucose tablets.
  - Eat 8 regular Life Savers®, or a small box of raisins (2 tablespoons).
  - Recheck your blood glucose 15 minutes after and if it's lower than 80 mg/dL, repeat treatment.
  - Follow treatment with a meal or snack if it's more than 1 hour until your regular meal.



▶ [Diabetes Pills](#)

▶ [Why Your Medicines May Change](#)

▶ [Concerns About Taking Medicine by Injection](#)

▶ [Fitting Injections Into Your Daily Routine](#)

▶ [Non-Insulin Injectables](#)

▶ [Long-Acting Insulin](#)

▶ [Mealtime Insulin](#)

▶ [Treating Low Blood Glucose](#)

▶ [Technology and Managing Diabetes](#)

## Helpful Tip:

Plan ahead and be sure to carry a snack with you at all times in case your blood glucose level falls. A small box of raisins, Life Savers®, or a juice box are just some ideas. Let your friends, family, and even coworkers know where to find them in case of an emergency.

## Myths vs Facts

**Myth:** Chocolate is a good way to treat low blood glucose.

**Fact:** No! Foods that contain fat (like chocolate) are not a good choice because they aren't absorbed quickly enough to raise your blood glucose levels.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will ask my healthcare professional if my medicine(s) may cause low blood glucose so I can get a better understanding of how to avoid, recognize, and treat it.

### Why It Matters

Learn if the medicine(s) you take put(s) you at risk for low blood glucose. This will help you understand your need to look for the warning signs and be prepared.

**2 Action**  
I will educate my friends and family about diabetes and what to do if my blood glucose gets too low.

### Why It Matters

You may need to rely on help from others to spot the symptoms of low blood glucose, get treatment, and call for emergency help, if needed.

**3 Action**  
I will buy glucose tablets and have them available when my blood glucose levels are low.

### Why It Matters

Glucose tablets are one way to treat low blood glucose. The glucose from the tablets is absorbed by the body quickly, which is needed when levels are low.

# Technology and Managing Diabetes

There are all sorts of technologies that help make managing your diabetes easier than ever before. In this module, you'll learn about all the options that are available so you can determine which, if any, work best for you. As always, if you have any questions and want to know if a certain device will fit your needs, talk with your diabetes care team.

## Key Points

Diabetes technology and devices can provide many benefits to certain people. However, not everyone would benefit from using these tools. Sometimes they are covered by insurance and sometimes, they are not. Sometimes technology can make living with diabetes easier and improve overall diabetes management, but sometimes it will not. Learn what might be right for you and if it is worth the cost.

## What You Need to Know:

- **Continuous Glucose Monitoring (CGM)** is a system that measures blood sugar readings every 1 to 5 minutes, 24 hours a day. It features a disposable sensor that is inserted below the skin, a transmitter, and a receiver.
  - Some CGM devices send the information to another device, such as a reader, or to an app on your smartphone or other device. CGM devices can also be a part of an insulin pump.
  - CGM tracks your blood glucose levels all day and night, and lets you view them any time. You can track your blood glucose changes over a few hours or days to see trends that allow you to better balance your food, physical activity, and medicine.
- **Connected insulin pens, also known as smart insulin pens**, combine a reusable injector pen with a smartphone app to help you better manage your insulin delivery. In addition to calculating and tracking your insulin dose, the app provides reminders, alerts, and reports. There are a few pens to choose from. Talk to your healthcare professional about what would best meet your needs.
- **Insulin Pumps** are insulin-delivering devices, more commonly used by people who have type 1 diabetes, that provide insulin 24 hours a day every day. They're loaded with insulin, which is delivered via a plastic catheter that's inserted under the skin and left in place for 3 days at a time.
- **Artificial Pancreas Device System** uses a continuous glucose monitor (CGM), an insulin infusion pump, and a program stored on the pump or a smartphone. It is sometimes referred to as a "closed-loop" system or "automated insulin delivery" system.
  - There are several different types of Artificial Pancreas Device Systems. These systems mimic the way a healthy pancreas would regulate blood glucose levels.
  - An Artificial Pancreas Device System does more than just monitor your blood glucose levels, it also automatically adjusts how much insulin is delivered with little or no input from you. For more information, discuss with your healthcare professional as some of these systems are still being researched.



- ▶ Diabetes Pills
- ▶ Why Your Medicines May Change
- ▶ Concerns About Taking Medicine by Injection
- ▶ Fitting Injections Into Your Daily Routine
- ▶ Non-Insulin Injectables
- ▶ Long-Acting Insulin
- ▶ Mealtime Insulin
- ▶ Treating Low Blood Glucose
- ▶ Technology and Managing Diabetes

## Helpful Tip:

With so many options to choose from, make time to talk with your diabetes care team about which option(s) might be best for you.

## Myths vs Facts

**Myth:** If I start with insulin injections, I have to stay with insulin injections.

**Fact:** If you don't like injections, talk with your healthcare professional about switching to an insulin pump. It might make it easier for you to manage your diabetes.

## Nice work! You've finished reading through the information on this topic.

Next Topic

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will talk with my diabetes care team about the new technologies to help manage my diabetes.

**Why It Matters**  
Your diabetes care team can help you decide which of the new technologies might be better suited to your individual needs.
- 2 Action**  
If I switch to a new technology, I will continue to monitor and record my blood glucose levels.

**Why It Matters**  
Monitoring your blood glucose levels helps you and your healthcare professional decide if your diabetes medicine, insulin, or any lifestyle changes need to be made.
- 3 Action**  
If I switch to a continuous glucose monitor, I will still keep a traditional meter handy as a backup or if my readings seem off.

**Why It Matters**  
If how you feel doesn't match the blood glucose reading on your CGM, having a backup meter is always a good idea.

# Cardiovascular Risk and Protection

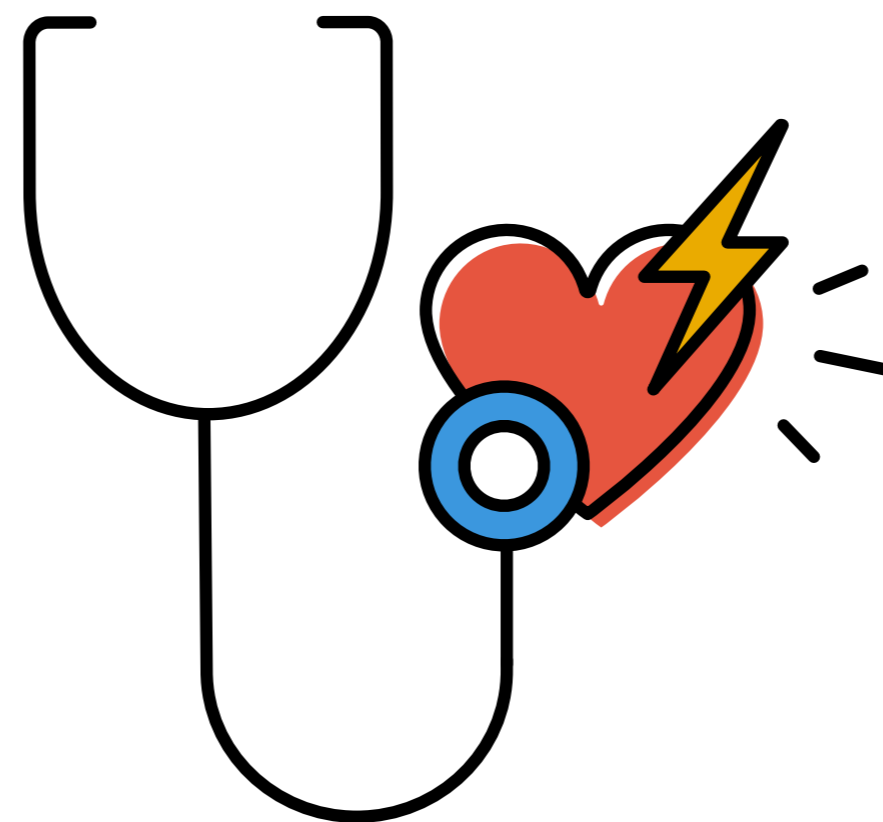
People with diabetes need to take extra care to manage their risk for heart disease compared to those who don't have diabetes. That's because people with diabetes are twice as likely to have a heart attack or stroke as those who don't have diabetes. In this module you'll learn ways to make protecting your heart a part of your everyday life.

## Key Points

- Diabetes puts you at increased risk for a heart attack or stroke.
- Eating healthy, staying physically active, and managing your ABC's (A1C, blood pressure, and cholesterol) can reduce your risk of heart disease and stroke.
- Several diabetes medicines have been shown to be beneficial in reducing risks for heart disease.
- Regular checkups are a smart way to care for your heart. This typically includes having your A1C checked, a thorough eye exam, a foot exam, and making sure that your cholesterol levels and blood pressure are where they should be for you.

## What You Need to Know:

- Having diabetes puts you at increased risk for having a heart attack or stroke. That's because high blood glucose levels over time can damage your blood vessels and nerves. Plus, many people with diabetes also have high blood pressure, high cholesterol, and are overweight—3 things that increase your chances of getting heart disease.
- Your risk of heart disease and stroke are higher the longer you live with diabetes.
- There are many things you can do to decrease your risk of heart disease, including: eating less saturated fat and more high fiber foods, such as fruits and vegetables, being physically active on a regular basis, and keeping your A1C in target range.
- Managing blood pressure is very important to reduce your risk of heart disease. For most, it means keeping blood pressure below 130/80 mmHg. For some who are at higher risk, the goals may be lower.
- Talk with your healthcare professional and schedule regular checkups. This can help you manage your blood glucose levels and also lower your risk of heart disease. Some diabetes medicines have special benefits in protecting heart health. Find out if you would benefit by using one of those medicines.
- Here are some other ways to care for your heart:
  - **Every 3 to 6 months** have your A1C and blood pressure checked by your healthcare professional.
  - **Once a year**, have the following blood tests: triglycerides and cholesterol (especially HDL and LDL) to check the health of your blood vessels and creatinine to check kidney function. In addition, have a thorough eye exam, which includes getting your eyes dilated so your doctor can see your optic nerve. You should also have a complete foot exam and get a flu shot and other recommended vaccines.



- ▶ Cardiovascular Risk and Protection
- ▶ Changing Behavior
- ▶ Checking Blood Glucose and A1C
- ▶ Creating a Plan You Can Stick With
- ▶ Coping with Stress
- ▶ Finding Support
- ▶ Identifying Your Goals and Motivation
- ▶ Sick Days
- ▶ Staying Motivated
- ▶ The Emotional Side of Diabetes
- ▶ Understanding Tests for Diabetes Management

## Helpful Tip:

Managing your weight is very important. In fact, for people with overweight or obesity, losing about 5-7% of your body weight can help. If you need help learning how to eat healthy portions, check out the Diabetes Plate Method module for details.

## Myths vs Facts

**Myth:** If I have diabetes, there is nothing I can do to manage my risk for heart attack or stroke.

**Fact:** You can do many things to reduce your risk, including eating healthy foods, maintaining a healthy weight, exercising regularly, and taking your diabetes medicine(s) as prescribed.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic** ▶

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will follow the recommendations for healthy eating and monitor my food portions to maintain a healthy weight.

### Why It Matters

Managing your weight can help you better manage your blood glucose levels and your heart health.

**2 Action**  
I will talk with my healthcare professional about having routine checkups to reduce my risk of heart disease.

### Why It Matters

Routine checkups can help alert your healthcare professional to changes in your blood glucose, cholesterol, weight, and other important factors that can impact your heart health.

**3 Action**  
I will be sure to schedule annual eye and foot exams.

### Why It Matters

Your eyes and feet can be affected by diabetes, which is why it is so important to have them checked by a healthcare professional at least once a year.

# Changing Behavior

Now that you're living with diabetes, chances are your diabetes care team has recommended that you change a few of your behaviors. You were probably told to become more active. Learning how to check your blood glucose, take medicines, or measure foods are other changes in behavior healthcare professionals often recommend.

Changing your behavior, even slightly, has the ability to change the course of your diabetes for the better. Even small changes can provide you with positive health benefits. Let's explore what some changes might be and how they may help.

## Key Points

- Changing or starting new behaviors isn't always easy, but with the right support—you can do it!
- Consider how these changes—even the small ones—may make a big difference in your health to help keep you motivated.
- Plan ahead and prepare for situations that can get in your way of changing your behavior by thinking of ways to overcome them.



## What You Need to Know:

- Changing behaviors may be a challenge. This is why it is often a good first step to think about some of the changes you need to make and how they can help.
- Breaking down the behavior you want to change into smaller steps will make it easier. Be as specific and realistic as possible. Instead of thinking about something broad and vague such as exercising more, break it down into each of the steps you might need to take to get to where you want to be, such as: I will get new sneakers or I will walk for 10 minutes today.
- Situations like holiday dinners or overnight trips might make it trickier to follow your meal plan. Making a plan that includes tips for handling things in advance is often helpful.
- Reach out to your family, friends, and diabetes care team for support. They can help motivate you and encourage healthy changes.
- Plan ahead and think about the things that trip you up and how you can either avoid or overcome them.

## Helpful Tip:

Focus on the benefits of changing unhealthy behaviors. When you see the benefits, you may see fewer obstacles. Don't try to change too many behaviors at once. That can be overwhelming and set you up for failure. You may even want your family members to join you as everyone can benefit from these healthy changes. Make a list of the behaviors you need and want to change, and try to tackle one each week.

## Myths vs Facts

**Myth:** Knowing that you need to make healthy changes should be enough to get you started.

**Fact:** Not true. It helps if you first understand how these changes can help improve your health. Seeing the big picture can be very motivating. Then, think of ways to make these changes doable.

## Nice work! You've finished reading through the information on this topic.

**Next Topic**

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will pick 1 health change that I can try today.

### Why It Matters

Starting slow may increase your chances of success.

**2 Action**  
I will identify 1 situation that gets in the way of my diabetes care.

### Why It Matters

Anticipating or avoiding obstacles that get in the way of keeping you on track can help you be better prepared for them.

**3 Action**  
I will tell the people on my diabetes care team what I need from them.

### Why It Matters

The more support you can get in managing your diabetes, the easier it may be to manage it.

- ▶ Cardiovascular Risk and Protection
- ▶ Changing Behavior
- ▶ Checking Blood Glucose and A1C
- ▶ Creating a Plan You Can Stick With
- ▶ Coping with Stress
- ▶ Finding Support
- ▶ Identifying Your Goals and Motivation
- ▶ Sick Days
- ▶ Staying Motivated
- ▶ The Emotional Side of Diabetes
- ▶ Understanding Tests for Diabetes Management

# Checking Blood Glucose and A1C

An important part of caring for your diabetes is checking your blood sugar (or blood glucose). Glucose, which is the main sugar found in your blood, comes directly from the foods that you eat and are your body's energy source. It is also important to know the results of your A1C blood test. Your A1C test results can give you a picture of where your blood glucose levels—on average—have been over the past 2 to 3 months.

Keeping track of both your blood glucose and A1C is called, “monitoring.” Monitoring is key because it gives you the information you need to know where your blood glucose levels are and where they might be headed. It is a good indicator for how the diabetes treatment plan is working. It's like a GPS for your diabetes management. This information will help guide you and your diabetes care team to better customize your diabetes care plan.



## Key Points

- Monitoring your blood glucose—at home with a meter and at the office of your healthcare professional to check your A1C—is an important part of managing your diabetes.
- Blood glucose can also be monitored with a device called a continuous glucose monitor (CGM) that tracks blood glucose levels all day and night. It works with a tiny sensor put under the skin usually on your belly or arm.
- Your blood glucose levels provide important information to your diabetes care team that may require adjustments to your current care plan.
- Studies show that keeping your A1C below 7% may reduce your risk of some diabetes-related concerns, such as eye, kidney, or nerve problems.

## What You Need to Know:

- You may feel fine even when your blood glucose levels are above target. This is why monitoring your blood glucose is so important.
- There are 2 ways to monitor your blood glucose:
  - Having an A1C blood test at your healthcare professional's office
    - These results tell you an average of how your blood glucose levels have been during the past 2 to 3 months.
  - Checking your blood glucose at home using a meter or continuous glucose monitor (CGM) on a daily basis. A CGM tells you the amount of time your blood glucose is within the target range set by your diabetes care team. Since everyone is different, your healthcare professional may specify that you check before or after meals.
    - Be sure to keep track of your blood glucose results and share them with your healthcare professional at your visits. The patterns of highs and lows can help guide any changes in your medicine that need to be made.
    - Ask your healthcare professional to recommend a meter or CGM that is covered by your health plan. This may save you money on test strips and lancets.
- Your diabetes care team will use your blood glucose results to make any changes to your care plan, including your medicines, eating plan, and physical activities.
- For most people, when you wake up and before meals, your blood glucose levels should be between 80 mg/dL and 130 mg/dL. One to 2 hours after meals, your levels should be less than 180 mg/dL. Your recommended targets may be different.
- Keeping your A1C levels below 7% has been shown to help reduce your risk of some common diabetes-related problems (eye, nerve, or kidney problems). It can also impact your cardiovascular system, foot health, and even your dental health.

### Helpful Tip:

Ask your healthcare professional what your target blood glucose and A1C numbers should be. This may help you stay on track.

### Myths vs Facts

**Myth:** Having high blood glucose levels is bad.

**Fact:** Your blood glucose levels aren't good or bad. They simply provide information about how well your diabetes care plan is working. Most people will have blood glucose that falls above or below range some of the time. The goal is to increase the amount of time it falls within the goal range.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
At my next visit, I will ask my healthcare professional what my target blood glucose range should be.

**Why It Matters**  
Knowing your blood glucose targets may help you know if you need to make changes to your diabetes care plan.

**2 Action**  
I will ask my health insurance company what their “preferred” meter or CGM is.

**Why It Matters**  
Using a meter that is covered by your insurance may help you save money on testing supplies.

**3 Action**  
Every day this week, I will check and log my blood glucose levels as often as my healthcare professional recommends.

**Why It Matters**  
Checking your blood glucose levels lets you know how well your diabetes is being managed.

- ▶ Cardiovascular Risk and Protection
- ▶ Changing Behavior
- ▶ Checking Blood Glucose and A1C
- ▶ Creating a Plan You Can Stick With
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# Creating a Plan You Can Stick With

Managing your type 2 diabetes may seem puzzling at first. In fact, it is a lot like putting the pieces of a puzzle together. One piece of the diabetes management puzzle is eating healthy and understanding the importance of portion control. Being active—and staying active—is another piece.

Then, of course, taking your medicine and monitoring your blood glucose levels are additional pieces. While each part of your diabetes management has its own challenges, putting all these pieces together and fitting them into your daily routine may seem especially tricky. This is why you need to have a plan.



## Key Points

- Try to make a plan that can work for you long term. If it doesn't seem to work, make a new plan.
- Choose short- and long-term goals that are realistic for you.
- Reach out to friends, family, and even your diabetes care team for support.

## What You Need to Know:

There are 6 key steps to making a plan that will work for you—now and in the future.

### 1. Take the first step.

Think about what's already working for you and use this as your starting point. It may be easier to make changes slowly.

### 2. Be realistic.

Set yourself up for success by choosing goals that seem realistic to you. Start small and build on your success. For example, consider taking a walk after dinner a few nights a week. Think about what will realistically fit into your life.

### 3. Be prepared for obstacles.

Life sometimes gets in the way of even the best plan. Think about how you might deal with obstacles. Reach out to someone on your diabetes care team for tips.

### 4. Focus on the positive.

Following a plan may be tricky at first. Find ways to reward yourself for all the positive changes you've made. Be kind to yourself if you have a slip and move on.

### 5. Find people to support you.

Consider joining a support group—either live or online. Share your plan and goals so you can get support when needed. You may also want to gather your friends, family, and even coworkers around you. Plus, your healthcare professional and others on your care team are also there with tips and words of encouragement.

### 6. Track your progress.

People who track their progress—and yes, even their missteps or failures—may be more likely to stick to their plan. Tracking successes can help boost your confidence. Tracking slips can give you clues about obstacles that are likely to get you off track. Figure out ways to avoid these obstacles, or ask your support team for tips, and you may be able to prevent future slips.

▶ [Cardiovascular Risk and Protection](#)

▶ [Changing Behavior](#)

▶ [Checking Blood Glucose and A1C](#)

▶ [Creating a Plan You Can Stick With](#)

▶ [Coping with Stress](#)

▶ [Finding Support](#)

▶ [Identifying Your Goals and Motivation](#)

▶ [Sick Days](#)

▶ [Staying Motivated](#)

▶ [The Emotional Side of Diabetes](#)

▶ [Understanding Tests for Diabetes Management](#)

## Helpful Tip:

Don't beat yourself up if you slip. It happens. Instead, try to find the lesson to be learned and prevent the next slip.

## Myths vs Facts

**Myth:** Scaring yourself about diabetes will get you to do what you need to do.

**Fact:** Fear can actually get you stuck and prevent you from reaching your goal. You may find it more helpful to focus on all the positive things you're doing to manage your diabetes and reward yourself. Build upon your success!

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will choose 1 thing that motivates me to take care of myself and manage my diabetes.

### Why It Matters

Reminding yourself of the deeper reasons for managing your diabetes can help keep you motivated.

**2 Action**  
I will choose 1 person who supports my healthy efforts.

### Why It Matters

This person can help you stay on track when you're feeling less confident or less motivated.

**3 Action**  
I will find a paper tracker, smartphone app, or wearable device to help me keep track of my healthy behaviors this week.

### Why It Matters

Logging your eating, physical activity, and blood glucose is important for maintaining your health and managing your diabetes. Finding a system that works for you is key.

# Coping with Stress

Most people have stress in their lives. The challenges that you and your family face living with diabetes can add to that stress. This stress can sometimes lead to depression, which is something that people with diabetes may be at higher risk for developing.

Additionally, coping with the unique stress that COVID-19 brings (such as isolation and added concerns about one's health) can add to these stress levels. Fortunately, there are things you can do to better handle how you cope. This topic will educate you about how stress affects your health and offer tips for managing it better.

## Key Points

- Stress can elevate your blood glucose levels. Sometimes, it can lower it and result in low blood glucose—if you're too stressed to eat than skip a meal.
- Find ways to cope with stress, whether it be leaning on your network of supportive family and friends, going for a walk, doing yoga, or reading a relaxing book.
- It's worth noting some of the common symptoms of depression, which include loss of interest or pleasure in doing things you typically enjoy, trouble sleeping or sleeping more than usual, and eating more or less than usual. If you have any of these symptoms or notice them in a friend or family member, talk with your healthcare professional. There are numerous things one can do to help cope with depression and you are not alone.

## What You Need to Know:

- Stress may directly affect your blood glucose levels. It can either raise or lower blood glucose levels. Here's why:
  - When you're in a stressful situation—maybe an argument with a friend—stress hormones, such as adrenaline, are released. This causes blood glucose levels to rise.
- Feeling isolated or “different” because of your diabetes can be stressful, too. Sometimes, this type of stress may make you want to skip a meal, but don't. A skipped meal could lead to low blood glucose.
- The day-to-day management of diabetes can add to your stress. Remembering to take your medicine(s), checking your blood glucose levels, eating healthy, and being active can add up. Predicting obstacles and planning ahead can help you feel like you are better able to manage things.
- Find healthy ways to cope with stress, such as deep breathing, meditation, or yoga.
- Check blood glucose more often when you are feeling stressed and see how it affects you.



## Helpful Tip:

Getting support from your friends, family, an online support group, or your diabetes care team can help you cope with stress. There may be times when it is helpful to talk with a mental health professional, especially if you're experiencing signs of depression. Ask your healthcare professional for a referral if you need one and remember that you are not alone. Your mental health is as important as your physical health.

## Myths vs Facts

- Myth:** If I were stronger, I would be able to handle stress better.
- Fact:** The only kind of strength that helps with the management of stress is a strong support system. Don't forget to reach out to family, friends, or your diabetes care group for help in managing stress.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will identify what life stresses make it harder for me to manage my diabetes.

### Why It Matters

Being aware of how life gets in the way may help you prepare for it and possibly even change it.

**2 Action**  
For the next week, I will focus on how to make the hardest part of managing diabetes easier.

### Why It Matters

You can reduce stress by talking with your diabetes care team or others in your support system. They may be able to help you find ways to change the way you look at stressful situations or change the environment that's causing stress.

**3 Action**  
This week, I will try 1 strategy to help manage stress—taking a walk, spending time with friends, and watching a movie.

### Why It Matters

Stress is a fact of life. Having tools to help manage stress may help.

- ▶ Cardiovascular Risk and Protection
- ▶ Changing Behavior
- ▶ Checking Blood Glucose and A1C
- ▶ Creating a Plan You Can Stick With
- ▶ Coping with Stress
- ▶ Finding Support
- ▶ Identifying Your Goals and Motivation
- ▶ Sick Days
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# Finding Support

Having the support of friends and family is important for everyone. But it's especially important for people with type 2 diabetes. In fact, studies show that one of the best predictors of how well someone takes care of their diabetes is the amount of support they have. A strong support network can make it easier to cope with the ups and downs of managing diabetes. How can you find the support you need? This topic offers some tips.

## Key Points

- Friends and family are usually eager to help, but they aren't mind readers. Talk with them about how they can support you in your efforts to manage your diabetes.
  - Maybe you just want to know that they're there for you when you want to talk.
  - They might be a great activity buddy—someone to walk with or engage in some sort of physical activity: yoga, meditation, or a group dance class.
  - Helping you keep your home food friendly and free of the foods you want to limit eating is another way for them to help.
  - People with diabetes can benefit in many ways by engaging with each other. One way to do so is to seek out peer-support communities. There are many diabetes online communities that offer support, share knowledge, and share practical advice for people with and affected by diabetes.
- Make a list of questions as they arise to ask your diabetes care team during your next visit.



## What You Need to Know:

- Your friends and family probably want to help, but they might not know what type of help you need. Do you need emotional support? They may need guidance to focus on the positive instead of pointing out what they think you are doing wrong. Do you need support to get certain things done, such as grocery shopping or keeping track of medical test results or appointments? Having a heart-to-heart talk with them is the first step to getting the support you need.
- Your diabetes care team is another source of support and may include a family doctor, endocrinologist, diabetes care and education specialist, nurse, pharmacist, dietitian, and other healthcare professionals. Members of your team can answer questions or concerns you may have about managing your diabetes.
- Puzzled by your blood glucose numbers? Feeling nervous about a new part of your care? Need a written copy of recommendations to help you understand? Your diabetes care team is an excellent source of information and support.

### Helpful Tip:

Many of us find it difficult to ask for help. Understanding that those who care about us—our friends and family—may want to help can make starting a conversation easier. After all, wouldn't you want to help them if they need support?

### Myths vs Facts

**Myth:** Only weak people need support.

**Fact:** Smart people know that going alone is never the best way to handle difficulties. We all need support from time to time.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will let my family know the kind of support I need to help me manage my diabetes.

#### Why It Matters

Your family may not know that you need or want their support and how to best offer it. Letting them know is the first step in making them part of your support network.

**2 Action**  
I will ask someone I trust, my significant other, or a friend or family member to come to my next diabetes appointment.

#### Why It Matters

Having someone with you to take notes and remind you of questions you want to ask can help. Being part of the appointment also helps the person understand the challenges you are facing.

**3 Action**  
I will call my healthcare professional when I have a question about my blood glucose readings.

#### Why It Matters

Understanding which factors affect your blood glucose numbers is important.

▶ **Cardiovascular Risk and Protection**

▶ **Changing Behavior**

▶ **Checking Blood Glucose and A1C**

▶ **Creating a Plan You Can Stick With**

▶ **Coping with Stress**

▶ **Finding Support**

▶ **Identifying Your Goals and Motivation**

▶ **Sick Days**

▶ **Staying Motivated**

▶ **The Emotional Side of Diabetes**

▶ **Understanding Tests for Diabetes Management**

# Identifying Your Goals and Motivation

Your diabetes is different from anyone else's—with uniquely individual reasons for working on healthy behaviors, staying motivated and following a diabetes care plan and goals. Once there's clarity about what your goals and motivations are, it's easier to take charge and better manage living with type 2 diabetes.

## Key Points

- Identify your motivating reasons or the “why” for following your diabetes care plan and for achieving your best possible health. Thinking about these reasons and their importance can actually help you stay motivated. Jot them down to serve as a concrete reminder. You may want to put this list somewhere visible to help keep you on track.
- Know your goals. Be as specific and realistic as possible. Little steps can lead to big progress.
- Think about the obstacles you face and make a plan for handling each one. Feeling prepared can be very empowering.

## What You Need to Know:

### Here are a few tips for setting your diabetes care goals:

1. Start by talking with your healthcare professional and teaming up with them to set specific and realistic goals. Discuss your “why” so your motivating reasons are clear.
2. Make your goals specific. For example, “I will check my blood glucose first thing every morning.”
3. Set no more than 1-2 goals at a time. If you try to do too much, you're less likely to succeed.

### Here are some tips for finding your “why” and for getting and keeping you motivated:

1. Each of us is motivated by different things. Here are a few that might also work for you:
  - I want to be healthy so that I can be there for my family.
  - I know someone who had problems as a result of not taking care of their diabetes. I don't want that to happen to me.
  - I want to feel better and have more energy.
2. Think about writing down your main motivations and putting them someplace where you'll see them every day.
3. When you reach a goal, think about how it makes you feel. Pretty good, right? Hold onto that feeling and use it to keep you motivated to move ahead.

## Helpful Tip:

Write down your goals and your motivations. Maybe it's more than just getting and staying healthy for yourself, but for your spouse and other family members, too. Use a magnet to place them on your refrigerator. This can help ensure that you see it every day—a few times each day!

## Myths vs Facts

**Myth:** I have a reason to feel motivated today and will use it to stay motivated in the future, too.

**Fact:** Just as your diabetes treatment goals may change with time, the same is true for your reasons to stay motivated.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
Write down the top 3 motivations for making healthy changes.

### Why It Matters

You may be more likely to succeed when you identify what motivates you. Remind yourself of this motivation when things get tough.

**2 Action**  
I will reward myself for sticking to my goals and achieving them this week.

### Why It Matters

Learning how to stick to your goals will teach you what may help you maintain healthy changes long term.

**3 Action**  
For the next week, I will try an exercise routine that I can manage.

### Why It Matters

Exercise helps your body become more sensitive to your own insulin and use it more effectively.



- ▶ Cardiovascular Risk and Protection
- ▶ Changing Behavior
- ▶ Checking Blood Glucose and A1C
- ▶ Creating a Plan You Can Stick With
- ▶ Coping with Stress
- ▶ Finding Support
- ▶ Identifying Your Goals and Motivation
- ▶ Sick Days
- ▶ Staying Motivated
- ▶ The Emotional Side of Diabetes
- ▶ Understanding Tests for Diabetes Management

# Sick Days

When you have diabetes, it's important to take good care of yourself when you're sick. That's because any illness, injury, recent surgery, or even having a tooth pulled may cause your blood glucose levels to rise. This topic will provide you with important information about how to take care of yourself during sick days.

## Key Points

- Your body produces stress hormones when you're sick, which can raise your blood glucose levels and increase the amount of insulin you need.
- Being sick may let you take off from work or school, but NOT from checking your blood glucose and taking your diabetes medicine.
- Get plenty of rest, drink lots of sugar-free fluids, and call your healthcare professional with any questions you may have if you're feeling worse or if your blood glucose levels change.

## What You Need to Know:

- When you're sick, your body makes stress hormones to fight off the infection. These stress hormones may also cause your blood glucose levels to rise, which can increase your insulin requirements.
- A sick day for people with diabetes can include any of the following:
  - Colds
  - Flu
  - Nausea or vomiting
  - Infection
  - Dental work, like having a tooth pulled
  - Stress
  - Injury
  - Surgery
- The "sick day plan" will help prevent your blood glucose levels from going too high, which could make it harder for your body to fight infections and may lead to serious medical problems if it's not addressed. Here's what it includes:
  - **Always take your diabetes medicine**—unless your healthcare professional tells you not to.
  - **If you're unable to eat solid food**, alternate between sugar-free drinks (diet soda, seltzer water, tea) and drinks that contain sugar (juice, regular soda) for the next hour.
  - **Check your blood glucose more often than usual.** For a mild illness, such as a cold, check your blood glucose several times a day. If you have a more serious illness, like the flu, check it more often because blood glucose levels may rise quickly.
  - **Drink plenty of fluids.** Try to drink at least 6 to 8 ounces of sugar-free, caffeine-free drinks every hour you're awake. This can help you stay hydrated, which is important if your blood glucose is high.
  - **Rest and keep warm.** Don't exercise and, if possible, try to have someone take care of you.
  - **Call your healthcare professional.** If your blood glucose is 250 mg/dL or higher for 2 blood glucose readings in a row, call your healthcare professional to let them know. If you have type 1 diabetes or take insulin, you may also have to check for ketones. Be sure to call your healthcare professional for further direction.



- ▶ Cardiovascular Risk and Protection
- ▶ Changing Behavior
- ▶ Checking Blood Glucose and A1C
- ▶ Creating a Plan You Can Stick With
- ▶ Coping with Stress
- ▶ Finding Support
- ▶ Identifying Your Goals and Motivation
- ▶ Sick Days
- ▶ Staying Motivated
- ▶ The Emotional Side of Diabetes
- ▶ Understanding Tests for Diabetes Management

### Helpful Tip:

Follow the recommended vaccination schedule for things like the flu, pneumonia, shingles, and COVID-19. If you're sick, reach out to your support team. See if a friend or family member might be able to help take care of you while you're not feeling well.

### Myths vs Facts

- Myth:** It's okay to stop taking your diabetes medicine when you're sick.
- Fact:** No! Your blood glucose levels may go up when you're sick, even if you're not eating much. That's why it's important to continue taking your diabetes medicine unless your healthcare professional tells you otherwise.

## Nice work! You've finished reading through the information on this topic.

Next Topic

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
The next time I'm ill, I will call my healthcare professional if I'm unsure of what to do.

#### Why It Matters

Constant nausea, diarrhea, vomiting, or being unable to keep fluids down, low blood glucose levels, or levels above 250 mg/dL twice in a row, abdominal pain, or fever—are all good reasons to call your healthcare professional. They can best advise you about what to do.

**2 Action**  
I will make sure to drink 8 ounces of sugar-free beverages every hour the next time I'm ill.

#### Why It Matters

Staying well-hydrated during an illness may help prevent dehydration.

**3 Action**  
I will check my blood glucose levels several times a day and record them every time I am sick.

#### Why It Matters

Checking your blood glucose levels more often when you're sick is important.

# Staying Motivated

We've all started something with great enthusiasm only to find that we become less motivated as time goes on. Staying motivated with your diabetes management plan is no different. Let's face it, keeping up with your physical activity, medication, and glucose monitoring can be tricky. Not to mention, staying on track with the foods you eat and their portion sizes. So how can you stay motivated so that these new behaviors become habit and help ensure your success? Keep reading for some helpful suggestions and tips.

## Key Points

- Staying motivated is important to keep you on track with your diabetes management plan.
- Learning the best ways to keep yourself motivated is a smart way to help ensure your success.

## What You Need to Know:

Here are 6 ideas that you can use when you're finding it tough to stay on track.

### 1. Review your goals.

It's easier to stay motivated if your goals are realistic. Look at your goals and see if they need a little fine tuning from time to time. For example, instead of promising to be active for a half hour every day, it's okay to break your activity time into three 10-minute segments. This may be easier for you to stick with it, and may also help boost your confidence to continue this and other pieces of your diabetes management plan.

### 2. Focus on your long-term goals.

Thinking about your long-term goals may make it easier to stay motivated and on track. For example, staying healthy to stay actively involved with your grandchildren may provide the right motivation for some.

### 3. Reward yourself.

Managing your diabetes can be a complicated task, at times. Be sure to reward yourself for keeping on track. Buy yourself some fresh flowers. Think of other things you can do to congratulate yourself on your achievements. Rewards can go a long way to keeping you motivated.

### 4. Adjust your environment.

If you're trying to eat healthy, stock your refrigerator and cabinets with healthy foods and snacks. Place unhealthy foods out of reach or remove them completely.

### 5. Track how well you're doing.

Keeping track of all that you're doing to help manage your type 2 diabetes can help you stay motivated. Especially when you see the progress you're making! These records may also help your healthcare professional make better informed decisions.

### 6. Turn to your support network.

Your friends, family, and your diabetes care team can help cheer you on when you're losing motivation. Great support can even be found from peers in online diabetes communities. Share your frustrations about sticking with your plan. They may have ways to reinvigorate your motivation.



[Cardiovascular Risk and Protection](#)

[Changing Behavior](#)

[Checking Blood Glucose and A1C](#)

[Creating a Plan You Can Stick With](#)

[Coping with Stress](#)

[Finding Support](#)

[Identifying Your Goals and Motivation](#)

[Sick Days](#)

[Staying Motivated](#)

[The Emotional Side of Diabetes](#)

[Understanding Tests for Diabetes Management](#)

## Helpful Tip:

Feeling less motivated? Don't beat yourself up. It happens to everyone. It may help to step back and look at the bigger picture. Keep in mind that a temporary slip up doesn't mean you're going to automatically slide downhill. Remember, tomorrow is a new day!

## Myths vs Facts

**Myth:** All I need is willpower to successfully manage my diabetes.

**Fact:** Willpower is great, but you'll also need motivation, support, realistic goals, and a plan for managing obstacles that come your way.

Nice work! You've finished reading through the information on this topic.

Next Topic



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will identify what is giving me the most trouble managing my diabetes.

### Why It Matters

You have to first identify the problem before you can find a solution.

**2 Action**  
I will identify the things in my life that get in the way of my efforts.

### Why It Matters

If you know what's tripping you up, you can figure out what to change.

**3 Action**  
When I start to get off track, I will call my healthcare professional or talk to others in my support network about how to face the challenge.

### Why It Matters

No need to go it alone. Your healthcare team may have some suggestions or may be able to make some changes in your management plan to make it easier for you to stay on track.



# The Emotional Side of Diabetes

Living with diabetes often comes with a lot of changes. You may need to change the way you eat and become more aware of portion sizes. Learning how to become more physically active may be another change for you. You may also need to add some important elements to your daily routine, like checking your blood glucose and remembering to take your medicine.

Incorporating all these changes into your life can be challenging. For many, it can feel like diabetes is controlling you rather than the other way around. This topic looks at ways to manage all these changes and avoid *diabetes distress* or *burnout*.

## Key Points

- Diabetes distress is the emotional response some people have to the burdens of living with diabetes. It is when living with diabetes can feel overwhelming.
- Diabetes burnout can happen when you feel that your efforts don't matter and can sometimes make you feel like a failure.
- Depression may be another struggle for people with diabetes. In fact, people with diabetes are twice as likely to develop depression than those without diabetes.
- If you're feeling overwhelmed, worried, distressed, or depressed, reach out to your support group for help.

## What You Need to Know:

- Managing diabetes can be tough and require a lot of effort all day, every day. Sometimes, even when you do the same things 2 days in a row, your blood glucose levels may be different.
- The demands of managing diabetes can wear people out. It is common to feel diabetes distress—or feel overwhelmed from time to time. Diabetes burnout is a term used to describe feeling that your efforts don't matter. It can make you feel frustrated and sometimes even make you feel like a failure.
- People with diabetes are 2 times more likely to become depressed than those without diabetes.
  - Symptoms include feeling sad or blue, more often than not. You may notice that you're no longer enjoying the things you once did.



## Helpful Tip:

If you're feeling overwhelmed or burned out from managing your diabetes, reach out to your support group! You don't have to cope with these feelings alone. Connecting with your family, friends, and diabetes care team can be a great help.

## Myths vs Facts

**Myth:** I must be weak if I'm feeling this overwhelmed and depressed.

**Fact:** Absolutely not true! Managing diabetes can be tough on even the strongest of us. If you're feeling frustrated, overwhelmed, or sad—reach out! You've got friends, family, and a diabetes care team who are there for you and can help.

Nice work! You've finished reading through the information on this topic.

Next Topic



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will pick 1 of the things that make me feel frustrated about managing my diabetes and discuss it with someone in my support network.

### Why It Matters

It helps to be aware of your feelings, especially as they can interfere with your diabetes care.

**2 Action**  
I will acknowledge my achievements in managing my diabetes.

### Why It Matters

Reminding yourself of how good you feel when things are going well is an important way to stay motivated.

**3 Action**  
For the next week, I will try to be aware of any negative thoughts about managing my diabetes and what triggers them.

### Why It Matters

It's important to understand what situations spark these negative thoughts and feelings about managing your diabetes. Being aware of them may help you overcome them easier.

- ▶ Cardiovascular Risk and Protection
- ▶ Changing Behavior
- ▶ Checking Blood Glucose and A1C
- ▶ Creating a Plan You Can Stick With
- ▶ Coping with Stress
- ▶ Finding Support
- ▶ Identifying Your Goals and Motivation
- ▶ Sick Days
- ▶ Staying Motivated
- ▶ The Emotional Side of Diabetes
- ▶ Understanding Tests for Diabetes Management

# Understanding Tests for Diabetes Management

Keeping your blood glucose in target range is a key objective for managing type 2 diabetes. That's why it's important for you to monitor and track your blood glucose levels. This will help your healthcare professional know how well your diabetes management plan is working and if you need to change or add to the medicines you're taking. Since measuring blood glucose levels is now a part of your life, it's helpful if you understand the tests and the language used to describe your results.



## Key Points

- There are different ways to monitor your blood glucose levels:
  - An A1C blood test, which is done at your healthcare professional's office, is perhaps the most important test as it helps determine how well your diabetes is managed over time.
  - Doing it yourself with a blood glucose meter, which is often called a blood *glucose* meter. (Glucose is another term for sugar.)
  - Wearing a device called a continuous glucose monitor (CGM), which tracks blood glucose throughout the day.
- Your blood glucose is always changing. Ideally, for many nonpregnant adults, it should be between 80-130 mg/dL before meals and below 180 mg/dL after meals.
  - The numbers are typically lower in the morning when you first wake up. This is called your *fasting plasma glucose* or FPG, for short. It's called this because you haven't had anything to eat for some time.
  - Your blood glucose levels are higher 1 to 2 hours after you have a meal. This is called *postprandial glucose* or PPG. The word *prandial* refers to meals.
- Monitoring blood glucose helps to show how well the diabetes medicines and treatment plan is working. It also helps avoid short-term problems like blood glucose going too high or too low.

## What You Need to Know:

### What is an A1C test?

- It's a blood test that is done at your healthcare professional's office.

### What does it do?

- It takes a 2-to-3-month average of your blood glucose levels.
- It measures the amount of glucose (sugar) that attaches to your hemoglobin, which is part of your red blood cells. The more glucose that attaches, the higher your A1C will be.

### How often will I need an A1C test?

- An A1C blood test is usually done 2 to 4 times a year. If you've been prescribed a new medicine, your healthcare professional may want to recheck your A1C in 3 to 6 months to see how well it's working.

### What's a good A1C test score?

- For people who don't have diabetes, their A1C can range from 4% to 6%.
- The goal for most people with diabetes is to have their A1C be less than 7%. Your healthcare professional can determine the A1C target that's right for you.
- An A1C that's above 7% is considered high for most people.

Studies show that as your A1C levels go up, so does your risk for having problems related to diabetes like heart disease, kidney disease, and nerve damage.

### What is an at-home blood glucose test?

- This is how you can keep track of your blood glucose on a daily basis. All you need is a small device called a glucose meter.
- Your healthcare team can help you learn how to use your meter, but it's best to talk with your health insurance carrier to learn which meter(s) they cover. Using their preferred meter can save you money.

### How does it work?

- After washing your hands, choose a finger to use. (You'll use a different finger each time to help avoid soreness.) With your hand below your waist, you'll use your lancet (a small broad-edged tool with a sharp edge) to "prick" the tip of your finger.
- Using a blood glucose strip, fill the strip's target area with blood from your finger.

### What are target blood glucose levels?

- Before meals, a usual target for most people is between 80 and 130 mg/dL.
- Two hours after meals and you should be below 180 mg/dL.
- At bedtime, between 90 and 150 mg/dL is common.

Your healthcare professional may suggest that you write down your blood glucose levels in a book or run reports. This can help you find patterns. It will also be helpful to share your results with your healthcare professional at your next appointment. If your numbers fall below 70 mg/dL or go above 250 mg/dL, *call your healthcare professional*.

### What is a CGM (continuous glucose monitor)?

- A CGM is a wearable tool that makes it easier to track blood glucose over time. There are different kinds of CGM and ways to use it. Talk with your healthcare professional to see if it's right for you.

### How does it work?

- A small wearable sensor is worn (usually on the belly or arm) and measures glucose in the fluid under your skin. It transmits the readings to a device (such as your phone) where you can view the numbers.

Please refer to **Checking Blood Glucose and A1C** for additional information.

## Helpful Tip:

Use this handy chart to see how your A1C translates into the blood glucose levels like you see on your monitor. This will help you have a sense of how your daily blood glucose relates to your long-term diabetes management.

If your A1C is this:	Your estimated average glucose (eAG) is this:
12%	298 mg/dL
11%	269 mg/dL
10%	240 mg/dL
9%	212 mg/dL
8%	183 mg/dL
7%	154 mg/dL
6%	126 mg/dL

Nice work! You've finished reading through the information on this topic.

Next Topic

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
This week, I will find out my most recent A1C result

**Why It Matters**  
Knowing your A1C lets you and your healthcare professional see how well your diabetes medicine is working.

**2 Action**  
I will check and log my blood glucose as recommended by my healthcare professional.

**Why It Matters**  
Checking your blood glucose with your meter helps you see how well your diabetes care plan is working for you.

**3 Action**  
If my next A1C result is not on target, I will talk with my healthcare professional about steps I can take to help lower it.

**Why It Matters**  
Your diabetes care plan, which includes the medicines you take, food choices, and activity, may need to be changed to help you get your A1C to your target goal.

- ▶ Cardiovascular Risk and Protection
- ▶ Changing Behavior
- ▶ Checking Blood Glucose and A1C
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EATING



MOVING



MANAGING



STAYING  
ON TRACK

# My Diabetes Learning Path

This program helps you personalize your learning needs at your own pace. It allows you to choose the information you need—from useful tips on healthy eating, being active, taking medicine, and staying on track—to support the diabetes management goals that you work with your healthcare professional to set.

[View All](#)



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ON TRACK

# All Modules List



## Eating modules

- ▶ **Dealing with Challenges to Eating Healthy**
- ▶ **Healthy Eating: Portion-Size Awareness**
- ▶ **Healthy Eating: Plate Method**
- ▶ **Reading a Nutrition Facts Label**



## Moving modules

- ▶ **Dealing with Challenges to Living a More Active Life**
- ▶ **Getting Started with an Active Lifestyle**
- ▶ **Making an Activity Plan Part of Your Routine**



## Managing modules

- ▶ **Diabetes Pills**
- ▶ **Non-Insulin Injectables**
- ▶ **Why Your Medicines May Change**
- ▶ **Long-Acting Insulin**
- ▶ **Concerns About Taking Medicine by Injection**
- ▶ **Mealtime Insulin**
- ▶ **Fitting Injections Into Your Daily Routine**
- ▶ **Treating Low Blood Glucose**
- ▶ **Technology and Managing Diabetes**



## Staying on track modules

- ▶ **Cardiovascular Risk and Protection**
- ▶ **Identifying Your Goals and Motivation**
- ▶ **Changing Behavior**
- ▶ **Sick Days**
- ▶ **Checking Blood Glucose and A1C**
- ▶ **Staying Motivated**
- ▶ **Creating a Plan You Can Stick With**
- ▶ **The Emotional Side of Diabetes**
- ▶ **Coping with Stress**
- ▶ **Understanding Tests for Diabetes Management**
- ▶ **Finding Support**



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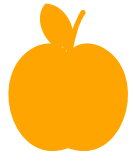
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# Eating Modules

▶ **Dealing with Challenges to Eating Healthy**

▶ **Healthy Eating: Portion-Size Awareness**

▶ **Healthy Eating: Plate Method**

▶ **Reading a Nutrition Facts Label**



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# Moving Modules

▶ **Dealing with  
Challenges to Living  
a More Active Life**

▶ **Getting Started with  
an Active Lifestyle**

▶ **Making an Activity Plan  
Part of Your Routine**



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# Managing Modules

▶ **Diabetes Pills**

▶ **Non-Insulin Injectables**

▶ **Why Your Medicines  
May Change**

▶ **Long-Acting Insulin**

▶ **Concerns About  
Taking Medicine  
by Injection**

▶ **Mealtime Insulin**

▶ **Fitting Injections Into  
Your Daily Routine**

▶ **Treating Low  
Blood Glucose**

▶ **Technology and  
Managing Diabetes**



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# Staying on Track Modules

▶ **Cardiovascular Risk  
and Protection**

▶ **Changing Behavior**

▶ **Checking Blood Glucose  
and A1C**

▶ **Creating a Plan You  
Can Stick With**

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▶ **The Emotional Side  
of Diabetes**

▶ **Understanding  
Tests for Diabetes  
Management**

▶ Dealing with Challenges to Eating Healthy

▶ Healthy Eating: Portion-Size Awareness

▶ Healthy Eating: Plate Method

▶ Reading a Nutrition Facts Label

# Dealing with Challenges to Eating Healthy

Eating healthy can present challenges for many of us. Maybe you were at a party and were faced with all sorts of yummy temptations. Or you had a bad day and thought rewarding yourself with food was the answer. Sound familiar? No problem. **I-SEEK** is a way to learn about yourself that may also help you understand your own barriers to eating healthy.

## Key Points

- I-SEEK is an acronym that stands for **I**mportance, **S**upport, **E**xpense, **E**nvironment, and **K**nowledge.
- The I-SEEK system can help you break through barriers and take steps toward healthier eating.
- The more specific and personal you make each of the I-SEEK steps, the better it can help you get on the road to success.

## What You Need to Know:

Let's look at each of the I-SEEK segments and how you can make this work for you.

### • IMPORTANCE

- Write the reasons why healthy eating is important to you. The more personal you can make these reasons, the more inspired and motivated you may feel.
- Here are some examples to get you started:
  - My family is concerned about my health. I want them to see that I am doing my best to make healthy changes.
  - I've cared for everyone else in my family and now, it's my turn to do what I can to live a long, healthy life.

### • SUPPORT

- Surround yourself with friends and family, and let them know how they can help support you in your effort to eating healthy.
- Ban negative self-talk and focus on all the things you CAN do. Instead of saying or thinking, "I won't be able to stick to this diet," give yourself words of encouragement.
- Need help supporting your efforts? There are many online communities that can help.

### • EXPENSE

- Healthy eating doesn't have to cost more. Some groceries offer a free service of a dietitian to help you select healthier options. Here are a few tips that may help:
  - Write a shopping list and buy only what's on your list. You may want to consider downloading a grocery list app.
  - Bring lunch and snacks with you. This will not only help control what you eat but may help you save money having to buy them.
  - Using frozen fruits and vegetables is usually just as nutritious. Plus, unlike fresh produce, you can buy and store them when they're on sale.

### • ENVIRONMENT

- Limit the triggers and cues in your food environment—at home or place of work—that trigger you to eat more.
- Keep tempting foods out of sight and put healthier foods within easy reach.
- Eat from smaller plates and bowls.
- Addressing food temptations—at home or on the road—is an important step toward healthier eating.

### • KNOWLEDGE

- Learn about your own eating habits and what triggers you to go off course. This can help you understand and overcome these barriers to healthy eating.
- Do junk food snacks seem to call your name late at night when you're alone or watching TV? Fill up a container with cut up fresh vegetables to grab-and-go, and munch on them instead. Or pour yourself a soothing cup of hot tea. Trade in your less healthy snacking habits for healthy ones.
- Bringing snacks to work can help you avoid the donuts in the break room or your coworker's candy jar.

## Helpful Tip:

Focus on all the delicious healthy foods that you can eat instead of what you can't. Make a list of foods you enjoy that are both healthy and nutritious. Keep them stocked and within easy reach. Get more helpful tips for eating healthy foods [here](https://diabeteseducation.novocare.com/healthy-eating/where-healthy-meets-delicious.html).

<https://diabeteseducation.novocare.com/healthy-eating/where-healthy-meets-delicious.html>

## Myths vs Facts

**Myth:** You have to be wealthy to truly eat healthy.

**Fact:** You can eat healthy in a budget-friendly way. For example, frozen fruits and vegetables can be bought on sale and stored for months. Visit a local farmer's market for fresh produce that is often less expensive than the grocery stores.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
Write an inspirational statement of why healthy eating is important to me.

**Why It Matters**  
Putting something in writing helps make it real.

**2 Action**  
Eat a vegetable salad before having a meal.

**Why It Matters**  
This not only encourages you to eat more veggies, but helps you fill up so that you eat less high-calorie foods.

**3 Action**  
I will organize my pantry shelves and refrigerator so the healthy food is more visible and the less healthy food is out of sight.

**Why It Matters**  
If healthy foods are more visible, you may be more likely to eat them.

**4 Action**  
I will choose someone on my diabetes care team to be my support person and help me stick with my plan.

**Why It Matters**  
Having ongoing support is linked with successfully changing behavior over time.

**Next Topic**

▶ **Dealing with Challenges to Eating Healthy**

▶ **Healthy Eating: Portion-Size Awareness**

▶ **Healthy Eating: Plate Method**

▶ **Reading a Nutrition Facts Label**

# Healthy Eating: The Plate Method

Making healthy food choices and planning meals in advance may help you manage your type 2 diabetes—and even your weight. In this topic, we'll explore the Plate Method, an easy and effective way to make healthy food decisions, eat reasonably sized portions, and help manage your blood glucose. Best of all, you don't ever have to count calories! Not a single one.

## Key Points

- The American Diabetes Association (ADA) recommends using your plate to create healthy meals. The Plate Method is a simple way to manage portion sizes and eat balanced meals. Even people without diabetes can benefit from eating in this healthy way, so get your family and friends on board too.
- Using this method helps you find the right amount of food to eat without measuring or counting carbs or calories.
- You'll be able to enjoy a healthy variety of foods. Your dietitian can provide additional help in selecting the best foods for you.
- Be sure to also have a cup on hand so that you can include 8 ounces of water or low- or non-fat milk with your meal. It can also be used to help you add fresh berries or other fruit to each meal.

## What You Need to Know:

- **Get a 9-inch plate.** A smaller plate will help you lose weight by controlling how much you eat. A packed 9-inch plate may even trick the eye into thinking you're eating lots more than you are. Choose whole foods as much as possible. Eating too many processed foods is linked to extra calories and weight gain. Make healthy swaps by choosing more whole grains, fruits, and veggies instead of ultra-processed convenience foods that are often made with refined grains and added sugars, salt, and fat.
- **Divide your plate in half.** Fill half your plate with non-starchy vegetables. Some common ones include asparagus, green beans, beets, Brussels sprouts, broccoli, carrots, cauliflower, spinach, tomatoes, peppers—and the list goes on. A colorful variety of veggies will brighten your plate and maybe even your mood.
  - If you're creating a plate for breakfast, leave this section empty.
- **Divide the other half of your plate into half again.** Now you have two quarters, or three parts, in total on your plate.
  - **Fill one quarter of your plate with starches or whole grains.** For breakfast, this might include oatmeal, whole grain toast, or cold cereal. (If you choose to have cereal for breakfast, use a small bowl that can hold about one cup.) For lunch or dinner, you might choose corn, brown rice, or whole grain bread. Other starches to consider include lentils, peas, pinto, or kidney beans. Some grains to choose from include oats, barley, quinoa, and pasta. Yes, pasta! Just remember to keep your serving to one quarter of your plate.
  - **Fill the other quarter of your plate with a healthy protein.** Foods like chicken, turkey, fish, lean meat, tofu, or eggs give you a wide variety from which to choose.
- **You'll also need to add 1 to 2 teaspoons of a healthy fat.** Olive or canola oil, almonds, cashews, pecans, peanuts, sesame seeds, trans fat-free margarine, olives, nut butter, and avocado all qualify. You may want to drizzle the oil on top of your veggies or sprinkle seeds on top instead. Nut butter or avocado make a delicious complement to the whole grain bread you may have chosen.
- **Be sure to also include fruit, as well as 8 ounces of low-fat milk, yogurt, or a plant-based milk with each meal.** And don't forget to drink water with your meals and throughout the day.

### Helpful Tip:

Remember to choose your beverages carefully, too. Avoid sugary drinks like juices, sodas, and sports drinks, which can raise your blood glucose and add unnecessary calories. Better choices are water, seltzer water, unsweetened tea, and diet zero-calorie drinks. For a spa-like treat, put a pitcher of water with cucumbers, strawberries, and fresh mint in the fridge.

### Myths vs Facts

**Myth:** The Plate Method is a diet for people with diabetes.

**Fact:** The Plate Method is a way to eat healthy that anyone with diabetes can use and enjoy.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will use a smaller plate each evening for dinner.

**Why It Matters**  
Using a smaller plate may help you eat smaller amounts of food.
- 2 Action**  
I will plan to eat 2 different types of non-starchy vegetables at dinner every night for the next week.

**Why It Matters**  
Non-starchy vegetables are full of vitamins, minerals, and fiber. They're also low in calories and carbs.
- 3 Action**  
I will try a different whole-grain food this week, such as quinoa or wild rice.

**Why It Matters**  
There are a variety of whole-grain foods that can provide added nutrition and interest to your meals.
- 4 Action**  
I will make some healthy swaps to reduce the processed foods I use, such as roasted almonds instead of granola bars, or old-fashioned oats instead of ready-to-eat breakfast cereal.

**Why It Matters**  
Research shows that just by swapping out highly processed foods for whole foods you'll save calories and it will likely improve blood glucose.

**Next Topic**

▶ **Dealing with Challenges to Eating Healthy**

▶ **Healthy Eating: Portion-Size Awareness**

▶ **Healthy Eating: Plate Method**

▶ **Reading a Nutrition Facts Label**

# Healthy Eating: Portion-Size Awareness

Eating right, being active, and taking your medicine all play important roles in managing your type 2 diabetes. Losing weight, if you need to, can also help. One of the key elements of weight loss is controlling your food portions. This can help you cut back on calories and carbohydrates (carbs).

With restaurant eating and online ordering so popular, it's no wonder that many of us are confused about what a "healthy" portion looks like. If you think about the enormous bowls of pasta served by most restaurants—which are often enough for 2 or even 3 people—you can understand the confusion.

## Key Points

- Portion control is a key part of managing your diabetes. Eating too much (or too little) of certain foods can affect your blood glucose and your weight.
- The American Diabetes Association (ADA) recommends using your plate to manage portion sizes. The Plate Method is a simple way to do this without measuring food.
- Eating from a smaller plate can make it easier to eat smaller portions.

## What You Need to Know:

- There's a difference between a portion and a serving.
  - **A portion** is the amount of food that you choose to eat. As you know, some of us eat very large portions.
    - The portion size that is appropriate for you may vary from others depending upon your size and level of activity. Your healthcare professional or a dietitian can best advise what an appropriate portion size is for you.
  - **A serving** is a measured amount of food that you see on a Nutrition Facts label. For example, a cereal box label may say that 1 cup of dry cereal equals 1 serving. The nutrition facts information (calories and carbs) is based on the listed serving size.
- Eating a larger than appropriate portion of certain foods can affect your blood glucose levels and your weight. For example, a large bowl of pasta—which is high in carbs— may cause your sugar levels to go up , and the extra calories can cause weight gain over time.
- Years ago, the size of an average dinner plate was between 8 and 9 inches and held about 800 calories. Today, the standard plate is between 10 and 12 inches and holds between 1,000 and 1,900 calories! Is it any wonder so many of us need to lose weight?
- Even if you don't need to lose weight, paying attention to what and how much you're eating—especially the carbs (breads, starches, fruit, and sweets)—will be helpful as you work to keep your blood glucose in target range.
- Measuring cups are great for dry foods, like cereal, pasta, and rice. Liquid measuring cups can help you determine a serving of milk or juice. Use measuring spoons for salad dressing, mayonnaise, and peanut butter. A scale can be used for meats and cheese (in ounces or grams).
- Out to dinner and don't have your measuring tools with you? No problem! You can use your hand to help.
  - One teaspoon = the tip of your thumb. This equals 1 serving of fat, such as butter, margarine, mayonnaise, or oil
  - One tablespoon = your thumb (from the tip to where it meets your palm)
  - One ounce = your index finger is the size of 1 ounce of cheese. One cupped hand, is how to measure nuts or dried fruit and 2 cupped hands will get you an ounce of chips, popcorn, or pretzels
  - One cup = the size of your fist
  - Three ounces = your opened hand—the size of your palm is the perfect way to measure a serving of fish, chicken, turkey, and beef. Your restaurant's 10-ounce juicy steak can provide you 2 extra meals!

## Helpful Tip:

Start reading the serving sizes on packages of the foods you buy. It'll help you become familiar with what is considered a serving. You may be very surprised. If you're dining out, cut a portion of your meal to eat and ask your server for a container to pack the other half to go.

## Myths vs Facts

**Myth:** It's best to weigh and measure foods before they're cooked.

**Fact:** Foods should always be cooked first and then weighed or measured.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will use measuring cups to determine the appropriate portion size more accurately.

### Why It Matters

Eating more than a single portion can add calories to your plate.

**2 Action**  
I will look at the serving sizes on the Nutrition Facts label for any new or different type of food or beverage that I consume.

### Why It Matters

Paying attention to the serving size on a food item can increase awareness about calorie and carbohydrate intake.

**3 Action**  
I will use a smaller plate, such as a salad plate, for my dinner tonight.

### Why It Matters

Eating from a smaller plate helps reduce portions.

**Next Topic**

- ▶ Dealing with Challenges to Eating Healthy
- ▶ Healthy Eating: Portion-Size Awareness
- ▶ Healthy Eating: Plate Method
- ▶ Reading a Nutrition Facts Label

# Reading a Nutrition Facts Label

Knowing how to read and understand a nutrition facts label is important—even if you don't have diabetes. These labels can help you keep track of carbs, fat, and sodium. They also give you information about the percent of your daily value of these things. Reading food labels can help you make healthy choices and better manage your diabetes.

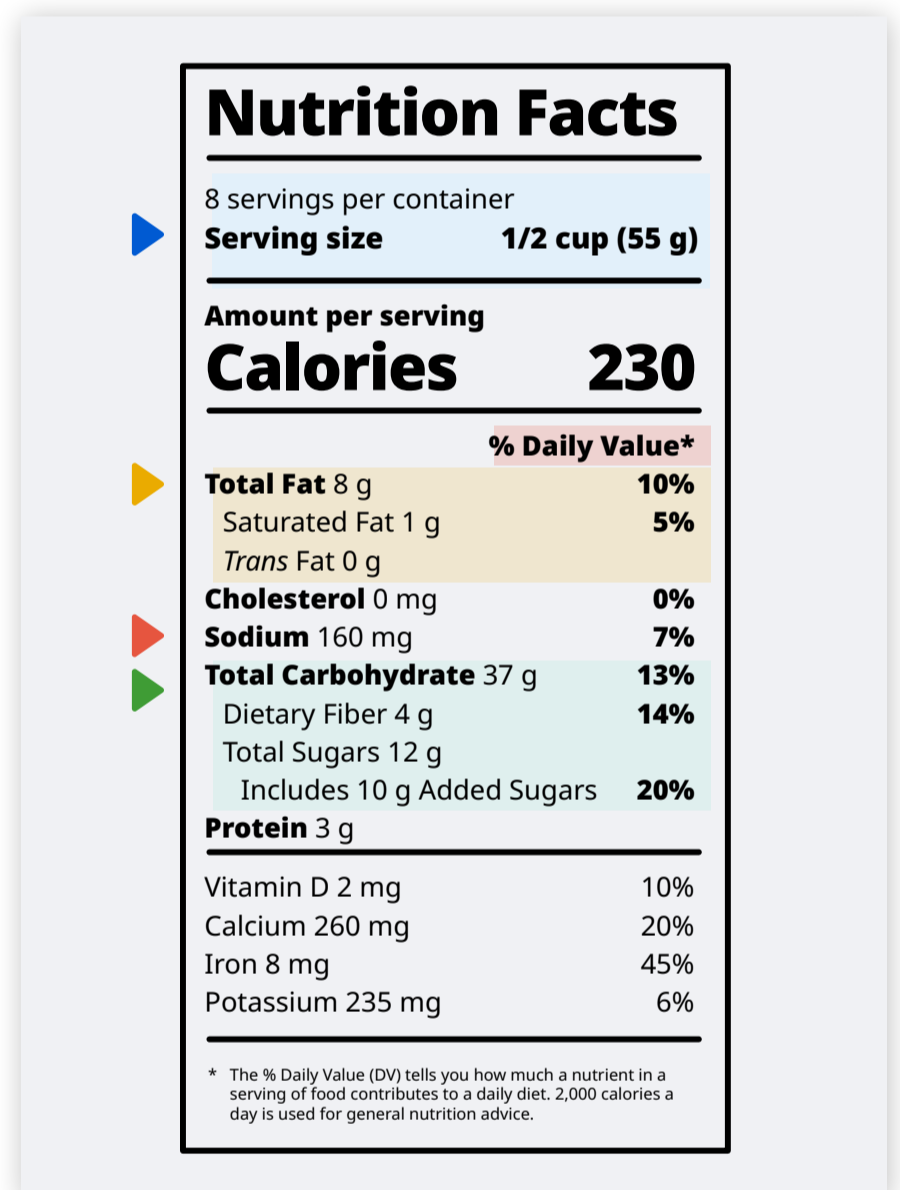
## Key Points

- The serving size is the first thing to review on a food label. It is based on the typical portion of food that is usually eaten. All of the nutrition information on the label (such as calories and grams of carbs) are based on the serving size that is listed. Talk with your healthcare professional to best determine what is right for you.
- The amount of food you eat may be different from the serving size listed. Adjust the numbers on the food label in your calculations based on what you actually eat.
- For most people, looking at the “total carbohydrate” figure is the next most important number to review. Your food plan may be based on a certain amount of carbohydrates at each meal.
- Pay attention to how much fat your food choice contains. Keep saturated fats to no more than a single gram and trans fats to 0 grams per serving.
- Choose foods with at least 3 grams of fiber per serving. These choices can help you feel fuller and eat less.

## What You Need to Know:

There are 5 key areas when reading a nutrition facts label.

- ▶ **Serving size:** Remember that most packages contain more than 1 serving, so be mindful of how much you're choosing to eat and adjust your calculations accordingly.
- ▶ **Saturated fat:** This is the unhealthy type of fat, which may raise your bad cholesterol or what is referred to as LDL-cholesterol (low-density lipoprotein). This is different than HDL-cholesterol (high-density lipoprotein), which is considered good. Try to choose foods that contain no more than 1 gram of saturated fat per serving.
- ▶ **Trans fat:** This is another kind of unhealthy fat, which can also raise your bad cholesterol. For this reason, look for foods that contain “0 grams” of trans fat.
- ▶ **Sodium:** Just because a food doesn't taste salty doesn't mean it's low in sodium. Low-sodium foods have no more than 140 mg of sodium per serving. High-sodium foods include canned foods, luncheon meats, and processed foods.
- ▶ **Total carbohydrates:** This figure combines 2 kinds of carbs—dietary fiber and sugars. Carbs raise blood glucose more than protein or fat. It's important to look at the total amount of carbs in a serving and not just the amount of sugar. Soluble fiber has little effect on blood glucose but can help keep your digestive tract working smoothly. It can also help you feel fuller. Choose foods with at least 3 grams of fiber per serving. It's important to know that carbs raise blood glucose even more than protein or fat.



## Helpful Tip:

Pay close attention to the serving size listed on the label. It may be a lot smaller than the portion sizes you've been eating. Use measuring cups and spoons as well as food scales to check your servings from time to time.

## Myths vs Facts

- Myth:** The only benefit of eating foods that are high in fiber is for your digestion.
- Fact:** Fiber helps you feel fuller, which may help you eat less. It also has benefits to helping keep blood glucose and blood fats closer to target range.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will look at the food labels on at least 3 items in my cabinets or pantry and note the 5 important areas.

**Why It Matters**  
Checking labels may help you learn what to look for to make healthy decisions about what and how much to eat.
- 2 Action**  
Next time I'm at the grocery, I will compare labels on 2 similar food items. After noting the differences, I can then decide which is the better choice.

**Why It Matters**  
Comparing labels on similar products may help you learn to select healthier options.
- 3 Action**  
I will practice my measuring skills for one day this week, weighing and measuring out all my food portions.

**Why It Matters**  
Being aware of your portions will help you better manage how much you eat and have more accurate calculations of calories and of carbohydrates—which may affect blood glucose.

Next Topic 

▶ **Dealing with Challenges to Living a More Active Life**

▶ **Getting Started with an Active Lifestyle**

▶ **Making an Activity Plan Part of Your Routine**

# Dealing with Challenges to Living a More Active Life

Trying to live a more active life with type 2 diabetes can have its challenges. You may feel self-conscious after periods of inactivity or wonder where you might find the time. Maybe you're concerned about your ability to stick with it once you start. Whatever challenges you think may get in your way, this topic may help you overcome them.

## Key Points

- Before starting any activity program, talk with your healthcare professional. Ask about your risk for low blood glucose from increased activity. They may want to do a few routine tests before letting you get started. Checking your blood pressure, arranging for a stress test to see how well your heart is working, even checking your eyes and feet for possible nerve damage are just some possible tests.
- Encourage yourself to get up and move. Consider rewarding yourself for your improved behavior. The promise of a monthly massage might be just the reward you need to become more active.
- Having an activities partner can help make living an active lifestyle more than just healthy, but social too.

## What You Need to Know:

Let's start by looking at some common barriers to being active and suggestions for ways to deal with them.

- **"I don't have the time to add activities to my life."**
  - Schedule activity time the way you would any other important appointment that you need to keep.
  - Make it a ritual at a set time each day.
  - Break up your activity into shorter sessions. Remember, three 10-minute sessions are just as beneficial as one 30-minute session.
- **"I don't like to be active alone."**
  - Ask a friend, neighbor, or family member to go for a walk with you.
  - Try a class. It's a great way to meet people.
  - Join a gardening or walking club.
- **"I'm afraid of having low blood glucose or hurting myself."**
  - Discuss your activity plan and your concerns with your healthcare professional.
  - Check your blood glucose before your activity. Eat a small snack, if needed.
  - Start slowly and stop if you feel any pain.
- **"I'm too tired to be active."**
  - Having more energy is one of the benefits of physical activity.
  - Start with a few minutes of activity and gradually increase your time by a few minutes every few days.
  - Be active at the time of day when you have the most energy.
- **"I have neuropathy (pain) in my legs and feet."**
  - Try a low-impact activity like swimming, a rowing machine, or chair activities.

### Helpful Tip:

Counting your steps using your smartphone, an app, or a fitness tracker is a great way to encourage you to get moving and keep moving. Establish a baseline of what your usual step count is before setting an unrealistic goal for yourself. Consider making this a friendly competition with your spouse or friends. The one who added the most steps at the end of the week, wins!

### Myths vs Facts

**Myth:** I've never been active and it's too late to start now.

**Fact:** It's never too late to become active. Anyone, at any age, can do some type of physical activity and benefit from it.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will set aside 10 to 15 minutes each morning and 10 to 15 minutes each evening to do some type of physical activity.

#### Why It Matters

You might feel like you don't have time to be active, but you probably do. Remember that you don't have to do all of your activity at one time. It's okay to split it up.

**2 Action**  
I will talk with my healthcare professional about ways to prevent low blood glucose after being active.

#### Why It Matters

Low blood glucose can make it difficult to stay active but there are ways to prevent it.

**3 Action**  
I will ask a friend to go walking with me.

#### Why It Matters

Being active with someone else may make it more likely that you'll stick with a routine.

**Next Topic**

▶ **Dealing with Challenges to Living a More Active Life**

▶ **Getting Started with an Active Lifestyle**

▶ **Making an Activity Plan Part of Your Routine**

# Getting Started with an Active Lifestyle

Getting and staying active is an important part of managing diabetes. Even if you've never been very active, it's easy to find ways to add physical activity to your day. Taking a walk with a friend, lifting light weights, even dancing are just a few ideas.

## Key Points

- Before starting any activity program, talk with your healthcare professional. They can best advise you about the activities that are right for you.
  - They may want to do a few routine tests before letting you get started. Checking your blood pressure, arranging for a stress test to see how well your heart is working, even checking your eyes and feet for possible nerve damage are just some possible tests.
  - They can also tell you if you're at higher risk for low blood glucose from increased activity based on your diabetes medicine.
- Physical activity can have a lot of health benefits. It can help control your blood glucose levels, lower your blood pressure, improve cholesterol levels, and lots more.
- Even everyday activities can count. You may be surprised to learn that vacuuming, gardening, even climbing the stairs are ways to help keep you active.

## What You Need to Know:

- Start slowly—even doing 5 or 10 minutes a day can help. Try to build up to doing at least 30 minutes of physical activity at least 5 days a week. You can break it up and do 10 minutes of activity in the morning, 10 more in the afternoon, and 10 minutes in the evening.
- Try to include all 3 types of physical activity into your routine.
  - **Aerobic exercise** can help improve your overall fitness and strengthen your heart. Some examples include taking a brisk walk, swimming, riding a bike, even dancing.
  - **Resistance training** strengthens and builds muscle, which can help you burn more calories. Try lifting weights, using resistance bands, or the weight machines at the gym. Remember to start with light weights and slowly add more.
  - **Flexibility training** can help improve the range of motion in your joints, help keep you limber, and relieve muscle stiffness. Yoga is a popular example of flexibility training.
- Want to continue to improve your blood glucose and fitness? Try to consistently be active at least 5 days a week for 30 minutes a day. If you want to lose weight, increase that to 6 days a week and for 60 to 90 minutes each day. Don't forget—it's okay to break up your activities into several 10-minute sessions a day as you increase your activity level.

### Helpful Tip:

If you can't talk during your activity, you're working too hard. Stop exercising and seek medical help if you're in pain or don't feel well during exercise.

## Myths vs Facts

**Myth:** Doing housework doesn't count as physical activity.

**Fact:** Yes, it does! In fact, this might make you look at raking leaves, carrying laundry up and down the stairs, and vacuuming in a whole new light.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
Make sure that I have footwear that provides support and comfort for my physical activity.

### Why It Matters

Wearing the right kind of footwear for physical activity is important. This is especially true if you have poor circulation or nerve damage in your feet and may not be able to sense or feel an injury.

**2 Action**  
Take a 10-minute lunchtime walk for 3 to 5 days this week.

### Why It Matters

Getting started can be the hardest part but knowing that you only have to do it for 10 minutes may make it easier. This can add up and help you achieve a goal of 150 minutes each week.

**3 Action**  
I will check my blood glucose before and after I am active twice a week.

### Why It Matters

Your diabetes medicine may put you at higher risk of low blood glucose when you are active. Reduce your risk of lows by checking blood glucose and having a small snack, if needed. Even if you're not at risk for going too low, checking before and after activity can show you the powerful impact activity can have on reducing blood glucose!

**Next Topic**

▶ **Dealing with Challenges to Living a More Active Life**

▶ **Getting Started with an Active Lifestyle**

▶ **Making an Activity Plan Part of Your Routine**

# Making an Activity Plan Part of Your Routine

Whether you have diabetes or not, it's always smart to check with your healthcare professional before starting any new physical activity. Do you find sticking with an activity or exercise routine to be hard? You're not alone! It may help to think about the reasons you have for being active and different ways to fit physical activities into your life.

There are many benefits to exercise, including: lowering blood glucose, blood pressure, and cholesterol; improving your heart health; burning calories to help manage your weight; lowering stress, and improving sleep.

## Key Points

- Think about what's motivating you to want to be physically active and what gets in the way.
- Start slow and build on your success.
- Schedule time on your calendar for physical activity.
- Schedule time with a companion to go for a walk. It may help you stay on track.
- Track your progress and reward yourself with new exercise clothing or comfortable shoes.

## What You Need to Know:

- Think about the benefits you will gain by being more physically active. Write down your goals. This may help remind you when you're feeling less motivated.
- Start off with something you know you can do and build upon it. Small steps can add up. Plus, feeling successful is a great way to keep motivated.
- Schedule time for physical activity and mark it on your calendar or in your smartphone. Make it a priority, much like taking your medicine or checking your blood glucose. Aim to be physically active 5 times a week.
- Being active for three 10-minute sessions each day has the same benefits as one 30-minute timeframe.
- There are benefits to all kinds of activities: aerobic (like brisk walking), strength building (using weights or resistance bands), and gentle stretching. Aim to do all three.
- Shake up your routine to keep you interested. Consider signing up for a yoga or dance class; group activities can be fun. Try some online exercises from the comfort of your home. If you enjoy taking walks, try a different route.
- Track your progress. Try using a pedometer or fitness app. Or, simply mark how you're progressing in the same place you track your blood glucose levels. This will all help to reinforce how hard you're working.

### Helpful Tip:

Reward yourself for being active. Maybe put a dollar in a jar after each activity you do. Then, buy yourself a present once the jar is filled. Maybe even a new pair of athletic shoes.

### Myths vs Facts

**Myth:** Walking every day is the best way for me to get and stay active.

**Fact:** While walking is great, you may want to mix up your activities. Trying new and different ways of being active can be fun. It can also help you stay motivated.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will identify 3 reasons why being physically active may be important for my health.

#### Why It Matters

If you recognize why being active is important, this can help keep you focused and motivated.

**2 Action**  
I will put a set of hand weights or a resistance band near the television.

#### Why It Matters

Exercising while you watch TV is a great way to fit physical activity into your day.

**3 Action**  
I will track my activity for 5 days this week to see how many steps I take.

#### Why It Matters

Using a fitness tracker to track activity may help you see the progress you're making.

**Next Topic**

▶ **Diabetes Pills**

▶ **Non-Insulin Injectables**

▶ **Why Your Medicines May Change**

▶ **Long-Acting Insulin**

▶ **Concerns About Taking Medicine by Injection**

▶ **Mealtime Insulin**

▶ **Fitting Injections Into Your Daily Routine**

▶ **Treating Low Blood Glucose**

▶ **Technology and Managing Diabetes**

## Diabetes Pills

In addition to eating healthy foods and physical activity, there are a wide variety of non-insulin options for treating diabetes. This module will give you an overview of some of the most common diabetes pills your healthcare professional may prescribe.

### Key Points

There are many kinds of diabetes pills that work in different ways. It is important to know the name of your diabetes medicine, how it works, how it is taken, the reason you take it, and possible side effects. It is common to take more than one kind of diabetes pill at once.

### What You Need to Know

- **Metformin** helps to keep the liver from making too much glucose.
- **Sodium-glucose co-transporter 2 or SGLT2 inhibitors** help the kidneys to get rid of extra sugar in the body through the urine.
- **DPP-4 inhibitors** help prevent the breakdown of GLP-1, a hormone produced in the intestines.
- **Thiazolidinediones or TZDs** help improve the liver, muscle, and fat cells' response to insulin, meaning more sugar leaves the blood and enters the muscles and fat (where it belongs).
- **Sulfonylureas** help the pancreas to release more insulin.
- **Alpha-glucosidase inhibitors** slow down the digestion of carbohydrates and keep the body from absorbing sugar.
- **Combination pills** contain medicines that work together. Since the different kinds of diabetes pills help lower blood glucose in different ways, some may be used together. These options allow healthcare professionals to come up with treatment plans that meet individual needs.

### Helpful Tip:

Whenever you start a new medicine, it is important to follow up with your healthcare professional to make sure it's the right medicine and/or the right dose for you. This is nothing to be concerned about and is more common than you may think.

### Myths vs Facts

**Myth:** If I need to take additional medicines for my diabetes it means that I'm getting worse.

**Fact:** Adding a new medicine should not be a cause for concern. It simply means that you may benefit from having a little extra help managing your blood glucose levels, not that you are doing something wrong.

### Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will monitor my blood glucose levels as recommended by my healthcare professional, and track and share them during my next visit.

**Why It Matters**  
Seeing patterns in your blood glucose levels can help your healthcare professional determine if your medicine needs to be adjusted.
- 2 Action**  
I will take my medicine(s) as directed.

**Why It Matters**  
It is important to take your medicine(s) as you've been directed. This is the best way to help ensure your blood glucose levels stay on track.
- 3 Action**  
I will keep my diabetes support team up to date about how they can be of help.

**Why It Matters**  
Your diabetes support team is there to help, but they can only help you if they know the areas in which you may need their support.

**Next Topic**

▶ **Diabetes Pills**

▶ **Non-Insulin Injectables**

▶ **Why Your Medicines May Change**

▶ **Long-Acting Insulin**

▶ **Concerns About Taking Medicine by Injection**

▶ **Mealtime Insulin**

▶ **Fitting Injections Into Your Daily Routine**

▶ **Treating Low Blood Glucose**

▶ **Technology and Managing Diabetes**

# Why Your Medicines May Change

You may be doing all that you can to help manage your type 2 diabetes: staying active, following a healthy diet, and checking your blood glucose regularly. Then your healthcare professional tells you that they're prescribing another medicine to help get your blood glucose levels and A1C in target range.

This new medicine might be another pill or it might be something that needs to be injected. Don't worry. This is normal and does not mean you have done something wrong. In fact, just as your diabetes may change over time, your medicines may need to change along with it.

## Key Points

- When you have type 2 diabetes, your body either doesn't make enough insulin or it doesn't respond to the insulin it makes as well as it should. This is why your blood glucose levels may rise.
- Your A1C levels, which are determined by a blood test, provide you and your healthcare professional with the average of your blood glucose levels over the past 2 to 3 months. If these levels are above your target level, it may signal the need for additional medicine.
- When you're given a new medicine, you will need to check your blood glucose at home more often. Your healthcare professional will recheck your A1C levels in about 3 to 6 months. This helps them see how well the new medicine is working for you and if any adjustments need to be made.

## What You Need to Know:

Here are some common ones other people with type 2 diabetes have shared.

- Your type 2 diabetes may change over time. In fact, this is common.
- Many people with type 2 diabetes take pills. The first line of therapy for type 2 diabetes generally includes metformin and comprehensive lifestyle changes. Metformin works to help the body make more insulin or better use the insulin that is already produced. Some people who have diseases in addition to diabetes and/or individual treatment or management needs may also need to take insulin or other types of medicines to keep blood glucose in target range.
- Each class or type of diabetes medicine works in a different way. Trying a different medicine may target a different part of the body and it may produce better results.
- It's important to let your healthcare professional know if you have any trouble taking or affording your medicine—or if you need help remembering to take it or get refills.
- Physical activity and healthy eating are important, but may not be enough to keep your blood glucose levels in range—even if you're taking metformin.

### Helpful Tip:

Watching what you eat and your portions, as well as getting and staying active, are ways to help you manage your diabetes. While diet and exercise are often not enough to keep your blood glucose levels controlled, they do play an important role.

### Myths vs Facts

**Myth:** If I'm taking medicine for my diabetes, I can eat whatever I want.

**Fact:** Healthy eating is still important as it plays a key role in your blood glucose, weight, blood pressure, and cholesterol.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will learn how my injectable medicine works.

#### Why It Matters

Understanding how your medicine works and how it can help your diabetes could make you more motivated to take it.

**2 Action**  
I will take my medicine as directed by my healthcare professional.

#### Why It Matters

Taking your diabetes medicine is an important part of managing your diabetes.

**3 Action**  
I will check my blood glucose more often to see how the medicine is working.

#### Why It Matters

Some medicines (such as insulin) may increase the risk for low blood glucose (hypoglycemia).

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▶ [Why Your Medicines May Change](#)

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# Concerns About Taking Medicine by Injection

If you've been told that you need to start taking an injectable medicine for your type 2 diabetes, don't worry. That's very common. As your diabetes changes over time, chances are, your medicine will too. This topic is full of helpful information and tips to help you get comfortable with both the idea of injectable medicines and the injection itself.

## Key Points

- Needing an injectable medicine doesn't mean that you did anything wrong. It just means that you need a little extra help to control your blood glucose.
- There are two types of medicine given by injection for diabetes. Insulin (there are different kinds) and non-insulin injectables. They are not the same thing. Know the name of the injectable medicine you've been prescribed, when it works, how to take it, and possible side effects.
- You're not flying solo, so relax. Learn about some tips for taking your medicine that may help to reduce pain or side effects. Your diabetes care and education specialist or nurse can show you what you need to do and know. Your pharmacist can help, too.

## What You Need to Know:

For every worry or concern you may have, there's a way to help manage it. It's important to not hold them inside you—but talk about them. Here are some common ones other people with type 2 diabetes have shared.

- **"I'm afraid of needles and worry that the shots will hurt."**
  - Fear is a common emotion when starting injections. Did you know that the needle used for injectable diabetes medicines is much smaller than the ones used for the flu vaccine? That's true! Sometimes the best way to get over your fear is to get on with taking your first shot. Most people find that it's less painful than testing their blood glucose.
- **"I'm worried about low blood glucose."**
  - Some injectable medicines have a higher risk of low blood glucose than others. Talk with your healthcare professional about having a plan to manage low blood glucose. Knowing what to do if this happens can help you feel more comfortable.
- **"I'm worried about side effects."**
  - All medicines can have side effects. If you're prepared and know what to do, your concerns may lessen. Ask your healthcare professional or pharmacist about the side effects of your diabetes medicine to watch out for, and what to do if you do have any.

### Helpful Tip:

You've got a team of healthcare experts at the ready! Your doctor, nurse, diabetes care and education specialist, and pharmacist are there to help. Don't be afraid to reach out with questions.

### Myths vs Facts

**Myth:** My diabetes must be very bad if I have to start an injectable medicine.

**Fact:** It's normal for your diabetes to change over time. It does not mean that you have done something wrong. Injectable medicines are just another tool that your healthcare professional has to get and keep your blood glucose in target range.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will ask my healthcare professional what side effects may occur and how to manage them.

#### Why It Matters

You may feel more comfortable knowing what to do if you experience a side effect. Your healthcare professional can help you manage side effects so that they don't get in the way of your treatment.

**2 Action**  
I will monitor and log my blood glucose, as directed, when starting this new medicine.

#### Why It Matters

Monitoring your blood glucose helps you and your healthcare professional know how well the medicine is working, and what adjustments may be needed.

**3 Action**  
I will write down my main concerns about having to start my new medicine and share this with a member of my diabetes care team.

#### Why It Matters

Overcoming your fears and concerns is the first step to understanding your diabetes. Your diabetes care and education specialist can help put your mind at ease.

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- [▶ Diabetes Pills](#)
- [▶ Non-Insulin Injectables](#)
- [▶ Why Your Medicines May Change](#)
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# Fitting Injections into Your Daily Routine

Over time, your diabetes may change, and you may be prescribed an injectable medicine, such as insulin, to help manage your blood glucose. This often makes some people uncomfortable, scared, and even wonder if they've done something wrong. Needing an injectable medicine is not your fault. It's just another way for your healthcare professional to help keep your blood glucose in target range.

## Key Points

- Your diabetes and blood glucose levels will likely change over time, even if you're doing everything right.
- Your diabetes care team can give you tips for making injections easier, so don't be shy about reaching out.
- Letting your friends and family know that you need to take an injectable medicine to help manage your diabetes may help you feel less concerned about taking your medicine during social situations.

## What You Need to Know:

- Most people with diabetes will eventually need more medicine, such as an injectable medicine.
- There are things you can do to make giving yourself injections less of a burden, such as:
  - Practicing on an "injection pillow"—a soft pad that's used just for this purpose. It's worth noting that the needles used with diabetes medications are small in comparison to traditional hypodermic needles.
  - Trying different delivery options for injectable diabetes medicines, such as a vial and syringe, a pump, or a pen.
  - Ask your diabetes care team about finding the delivery option that works for you. For example, there are prefilled disposable pens that you may prefer.
- Talk with your friends and family about your need to take an injectable medicine to help manage your diabetes. This may help lessen your concerns about having to take your injectable medicine in a social situation, like during a family gathering.

## Helpful Tip:

Focus on the positive. Ask your healthcare professional or pharmacist about how your injectable medicine is going to help keep your blood glucose in target range. Reaching your blood glucose goal may lead to benefits that you didn't even realize—such as sleeping better and improved vision. Knowing the benefits and focusing on them, may make things easier.

## Myths vs Facts

**Myth:** Injections are always painful.

**Fact:** There are ways and options to make injections easier, which is why it's important to talk with your diabetes care team. They can give you some helpful tips.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will practice injecting into an injection pillow.

**Why It Matters**  
Practicing with an injection pillow can help you learn how to give yourself an injection safely.
- 2 Action**  
I will ask my diabetes care team for tips about making injections more routine.

**Why It Matters**  
Reaching out to experts always makes sense. They have lots of experience and have learned all sorts of tips they'd be happy to share to make taking your medicine easier.
- 3 Action**  
For the next week, I will focus on how taking my injectable medicine is helping me stay healthy.

**Why It Matters**  
Thinking positively may help you stay on track. It may also help you look at your medicine as an important partner in caring for your health.

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## Non-Insulin Injectables

People with type 2 diabetes may not make enough of a hormone called GLP-1 (glucagon-like peptide-1), which is released after eating. GLP-1 receptor agonists (GLP-1 RAs) are medicines that work by replacing what the body isn't producing. There are several kinds of GLP-1 medicines. They can be used alone for treatment of type 2 diabetes or along with other diabetes medicines.

GLP-1 is also available as part of a dual GLP-1/gastric inhibitory peptide (GIP) receptor agonist medicine. Another non-insulin option your healthcare professional may prescribe is an amylin agonist. This is an injectable drug that acts like amylin, a naturally occurring hormone produced by the pancreas.

### Key Points

- GLP-1 agonists are a class of medicines that are usually taken by injection for people with type 2 diabetes. These medicines are not the same as insulin. They help the pancreas make the right amount of insulin at mealtime. They can be very effective in helping to lower A1C and reduce weight, and may lessen risks linked to heart disease.
- An amylin agonist is a medicine taken by injection, and used along with insulin, in people with type 2 diabetes.

### What You Need to Know:

- GLP-1 medicines mimic or copy the action of one of the body's natural hormones—glucagon-like peptide-1. They are also referred to as GLP-1 agonists. There are three ways GLP-1 RAs help keep blood glucose in target range. They:
  - *Help* the **pancreas** release more insulin after you've eaten
  - *Tell* the **liver** not to make so much sugar (by releasing glucose) at mealtimes
  - *Slow* down the movement of food leaving the **stomach** so after-meal blood glucose levels don't go as high
- Most kinds of GLP-1 medicines are "long-acting" and taken with a once-weekly injection. Some are "short-acting" and taken once or twice a day. Talk with your healthcare professional about which kind is right for you.
- An amylin agonist mimics or copies the action of one of the body's natural hormones—amylin. It:
  - Slows the movement of food leaving the stomach so after-meal blood glucose levels don't go as high
  - Tells the liver not to make so much sugar (by releasing glucose) at mealtimes
- An amylin agonist is taken with meals

### Helpful Tip:

The most common side effects of these medicines are gastrointestinal symptoms, mainly nausea. If you experience nausea, be sure to contact your healthcare professional. He or she will offer guidance on ways to manage it, which may include:

- Eat bland, low-fat foods, like crackers, toast, and rice
- Eat foods that contain water, like soups and gelatin
- Avoid lying down after you eat
- Go outdoors for fresh air
- Eat more slowly

### Myths vs Facts

**Myth:** Non-insulin injectable medicines carry the same risk of hypoglycemia (low blood glucose) as insulins.

**Fact:** Non-insulin injectables by themselves have a low risk of hypoglycemia. However, hypoglycemia can become a serious risk if they are taken alongside other medications that lower blood glucose, such as sulfonylureas or insulin. Learn about your risk of having low blood glucose and know how to prevent and treat it if necessary.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will talk with my healthcare professional to learn if non-insulin injectable medicines might be right for me.

#### Why It Matters

While there are many benefits to these medicines, there can be some risks if not taken correctly or if your full medical history is now known.

- 2 Action**  
If cost is an obstacle to taking non-insulin injectable medicines, I will ask about financial patient assistance programs that can help.

#### Why It Matters

While these medicines can cost more than other diabetes medicines, the benefits can be worth it. Financial assistance programs can help make the medicine affordable.

- 2 Action**  
I will monitor my blood glucose and weight regularly and share the information, along with any side effects, with my healthcare professional.

#### Why It Matters

Seeing glucose levels going in the right direction can motivate you to stick with your new medication plan. It will also provide information to see if changes in the prescription are needed.

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▶ **Diabetes Pills**

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▶ **Why Your Medicines May Change**

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## Long-Acting Insulin

Long-acting insulin, also called background insulin, works to keep blood glucose in target range between meals and during the night. It reaches the bloodstream several hours after injection and tends to lower glucose levels for up to 24 hours.

There are several different kinds of long-acting insulins. It is important to know the specific kind you take and the facts about how it works. This module will help you learn about this important type of insulin.

### Key Points

There are two main types of insulin. One type acts slowly and is called “background” insulin or basal insulin because it works in the background throughout the day and night. The other kind of insulin is called mealtime insulin and is taken before eating.

### What You Need to Know:

- Background insulin is taken once or twice a day at the same time each day. It helps manage blood glucose levels between meals and during the night. It does not need to be taken with food.
- Some background insulin is “long-acting”—meaning it has a duration of action of up to 24 hours and it does not have a peak action time—or a time when it works the hardest. Another kind is called “intermediate-acting” and while it can work for up to 24 hours, it has a peak action time between 4 and 12 hours.
- Often background insulin is taken with another diabetes medicine—either diabetes pills, or a mealtime insulin.
- Premixed insulins are a combination of mealtime and background insulin.
- The recommended dose is different for each person. It is based on several factors including your weight and the level of sugar in your blood.

### Helpful Tip:

- It's common for your healthcare professional to adjust the dose of your insulin to meet your body's unique demands. This doesn't mean there is something wrong. It may just take some time to fine tune your dose to meet your personal needs.
- If using an intermediate-acting insulin (like NPH), a snack may be needed between the lunch and dinner meal to reduce the risk of low blood glucose.
- Long-acting insulin can come in prefilled insulin pens or it can be given using a syringe with a vial of insulin.
- Be sure to refer to the package insert that came with your medicine for instructions on how to store it. Storage information is likely to be on the website for your medicine as well.
- Don't use insulin that is past its expiration date.

### Myths vs Facts

**Myth:** There is no risk for hypoglycemia (low blood glucose) with long-acting or background insulin.

**Fact:** Long-acting insulin can still lead to hypoglycemia, and risk increases if taken with mealtime insulins or with certain diabetes pills (like sulfonylureas).

### Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
Discuss any problems you may have taking insulin (including fear, confusion, worry about side effects, remembering to take it or the cost) with my healthcare professional.

#### Why It Matters

Learning strategies to help address these barriers can help make taking medicine easier and keep you healthier.

- 2 Action**  
Monitor your blood glucose according to the recommended schedule.

#### Why It Matters

The best way to know how a new insulin is working is to do home blood glucose monitoring. Monitor more often when starting a new medicine. If blood glucose is usually in target range, it is doing its job,

- 3 Action**  
Rotate the sites where injections are given.

#### Why It Matters

If injections are always given in the exact same spot, fatty lumps could develop making it harder for the insulin to be absorbed.

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- ▶ [Diabetes Pills](#)
- ▶ [Non-Insulin Injectables](#)
- ▶ [Why Your Medicines May Change](#)
- ▶ [Long-Acting Insulin](#)
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# Mealtime Insulin

If you have type 1 diabetes, you need to take insulin. About 50% of people with type 2 diabetes will eventually also need to take insulin. Needing to take insulin doesn't mean your diabetes is getting worse; it just means your pancreas isn't making enough of this blood glucose-lowering hormone. There are several different types of insulins.

In this module, we're going to learn about rapid-acting and short-acting insulins. Rapid-acting insulin acts quickly (in 10 to 30 minutes). It peaks in about 30 minutes to 3 hours after injection and lasts between 3 and 5 hours. Short-acting insulin usually reaches the bloodstream within 30-60 minutes after injection, peaks between 2 and 5 hours after injection, and lasts up to 12 hours.

## Key Points

- Rapid-acting insulin works as quickly as 10 minutes. Short-acting insulin works as quickly as 30 minutes.
- You inject rapid-acting insulin up to 15 minutes before a meal, or short-acting insulin 30 minutes before a meal, which is why they're often called "mealtime insulins."
- Rapid-acting and short-acting insulin work by replacing what your body makes—or should make—naturally.

## What You Need to Know

- Rapid-acting insulin starts to drop your blood glucose level in as soon as 10 minutes, but if your blood glucose is high, you may want to wait longer before eating.
- Rapid-acting insulin is often called, "mealtime insulin" because you take it up to 15 minutes before meals, during, or slightly after a meal.
- Rapid-acting insulin helps manage blood glucose levels after you eat a meal or a snack.
- You may hear your healthcare professional refer to "peak time." This is when the insulin is working its hardest to lower your blood glucose.

### Helpful Tip:

You may need to take a long-acting insulin along with the mealtime insulin your healthcare professional has prescribed. A long-acting insulin helps control your blood glucose levels between meals and during the night and is taken 1 to 2 times a day.

### Myths vs Facts

- Myth:** If you need to take insulin, it means you've done something wrong managing your diabetes.
- Fact:** Needing to take insulin doesn't mean you've done something wrong. It just means your body needs extra help in managing your blood glucose levels.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will make sure to take my rapid-acting insulin up to 15 minutes before a meal or as directed by my healthcare professional.

**Why It Matters**  
While rapid-acting insulin starts to work as soon as 10 minutes, if your blood glucose is high, you may want to wait a little longer to eat after injecting.
- 2 Action**  
I will not blame myself for needing to take insulin as it doesn't mean I did anything wrong.

**Why It Matters**  
Needing to take insulin simply means your body needs a little extra help managing your blood glucose levels for good health. It doesn't mean you failed or did anything wrong.
- 3 Action**  
I will talk with my healthcare professional to see if a mealtime insulin is right for me.

**Why It Matters**  
Your healthcare professional can best determine if a particular type of medicine is right for you.

**Next Topic** 

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# Treating Low Blood Glucose

Low blood glucose, also known as hypoglycemia, sometimes happens as you work toward managing your type 2 diabetes with certain pills or insulin. The good news is that it's treatable. But it's important to recognize the symptoms of low blood glucose and know how to treat it effectively.

## Key Points

- Hypoglycemia, or low blood glucose, is a treatable condition.
- If your blood glucose levels fall too low, serious problems can happen—you may fall, have a driving accident, pass out, have a seizure, or worse.
- Being prepared for a low blood glucose event is wise.

## What You Need to Know:

- Low blood glucose is very treatable. It is often a side effect of certain diabetes medicines (insulin and some pills).
- It happens when your blood glucose level falls below 70 mg/dL. If you are experiencing symptoms and are unable to check your blood glucose for any reason, treat the hypoglycemia.
- Some common warning signs of low blood glucose include:
  - Feeling dizzy or shaky
  - Confusion or trouble focusing
  - Blurred vision
  - Feeling weak
  - Irritability before meals
  - Increased hunger
- Low blood glucose may be caused by:
  - Skipping a meal or eating too little food, especially carbohydrates
  - Not having a snack or not adjusting your insulin before being physically active
  - Taking too much medicine or at the wrong time
- If you are able to check your blood glucose with a meter and see that it's low, these are some ways to treat it:
  - Drink a half cup of fruit juice, regular soda (NOT diet), or 8 ounces of skim or low-fat milk.
  - Take 4 glucose tablets.
  - Eat 8 regular Life Savers®, or a small box of raisins (2 tablespoons).
  - Recheck your blood glucose 15 minutes after and if it's lower than 80 mg/dL, repeat treatment.
  - Follow treatment with a meal or snack if it's more than 1 hour until your regular meal.

### Helpful Tip:

Plan ahead and be sure to carry a snack with you at all times in case your blood glucose level falls. A small box of raisins, Life Savers®, or a juice box are just some ideas. Let your friends, family, and even coworkers know where to find them in case of an emergency.

### Myths vs Facts

**Myth:** Chocolate is a good way to treat low blood glucose.

**Fact:** No! Foods that contain fat (like chocolate) are not a good choice because they aren't absorbed quickly enough to raise your blood glucose levels.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will ask my healthcare professional if my medicine(s) may cause low blood glucose so I can get a better understanding of how to avoid, recognize, and treat it.

**Why It Matters**  
Learn if the medicine(s) you take put(s) you at risk for low blood glucose. This will help you understand your need to look for the warning signs and be prepared.
- 2 Action**  
I will educate my friends and family about diabetes and what to do if my blood glucose gets too low.

**Why It Matters**  
You may need to rely on help from others to spot the symptoms of low blood glucose, get treatment, and call for emergency help, if needed.
- 3 Action**  
I will buy glucose tablets and have them available when my blood glucose levels are low.

**Why It Matters**  
Glucose tablets are one way to treat low blood glucose. The glucose from the tablets is absorbed by the body quickly, which is needed when levels are low.

**Next Topic**

- [▶ Diabetes Pills](#)
- [▶ Non-Insulin Injectables](#)
- [▶ Why Your Medicines May Change](#)
- [▶ Long-Acting Insulin](#)
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# Technology and Managing Diabetes

There are all sorts of technologies that help make managing your diabetes easier than ever before. In this module, you'll learn about all the options that are available so you can determine which, if any, work best for you. As always, if you have any questions and want to know if a certain device will fit your needs, talk with your diabetes care team.

## Key Points

Diabetes technology and devices can provide many benefits to certain people. However, not everyone would benefit from using these tools. Sometimes they are covered by insurance and sometimes, they are not. Sometimes technology can make living with diabetes easier and improve overall diabetes management, but sometimes it will not. Learn what might be right for you and if it is worth the cost.

## What You Need to Know:

- **Continuous Glucose Monitoring (CGM)** is a system that measures blood sugar readings every 1 to 5 minutes, 24 hours a day. It features a disposable sensor that is inserted below the skin, a transmitter, and a receiver.
  - Some CGM devices send the information to another device, such as a reader, or to an app on your smartphone or other device. CGM devices can also be a part of an insulin pump.
  - CGM tracks your blood glucose levels all day and night, and lets you view them any time. You can track your blood glucose changes over a few hours or days to see trends that allow you to better balance your food, physical activity, and medicine.
- **Connected insulin pens, also known as smart insulin pens**, combine a reusable injector pen with a smartphone app to help you better manage your insulin delivery. In addition to calculating and tracking your insulin dose, the app provides reminders, alerts, and reports. There are a few pens to choose from. Talk to your healthcare professional about what would best meet your needs.
- **Insulin Pumps** are insulin-delivering devices, more commonly used by people who have type 1 diabetes, that provide insulin 24 hours a day every day. They're loaded with insulin, which is delivered via a plastic catheter that's inserted under the skin and left in place for 3 days at a time.
- **Artificial Pancreas Device System** uses a continuous glucose monitor (CGM), an insulin infusion pump, and a program stored on the pump or a smartphone. It is sometimes referred to as a "closed-loop" system or "automated insulin delivery" system.
  - There are several different types of Artificial Pancreas Device Systems. These systems mimic the way a healthy pancreas would regulate blood glucose levels.
  - An Artificial Pancreas Device System does more than just monitor your blood glucose levels, it also automatically adjusts how much insulin is delivered with little or no input from you. For more information, discuss with your healthcare professional as some of these systems are still being researched.

### Helpful Tip:

With so many options to choose from, make time to talk with your diabetes care team about which option(s) might be best for you.

### Myths vs Facts

**Myth:** If I start with insulin injections, I have to stay with insulin injections.

**Fact:** If you don't like injections, talk with your healthcare professional about switching to an insulin pump. It might make it easier for you to manage your diabetes.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will talk with my diabetes care team about the new technologies to help manage my diabetes.

**Why It Matters**

Your diabetes care team can help you decide which of the new technologies might be better suited to your needs.

- 2 Action**  
If I switch to a new technology, I will continue to monitor and record my blood glucose levels.

**Why It Matters**

Monitoring your blood glucose levels helps you and your healthcare professional decide if your diabetes medicine, insulin, or any lifestyle changes need to be made.

- 3 Action**  
If I switch to a continuous glucose monitor, I will still keep a traditional meter handy as a backup or if my readings seem off.

**Why It Matters**

If how you feel doesn't match the blood glucose reading on your CGM, having a backup meter is always a good idea.

**Next Topic**

<a href="#">▶ Cardiovascular Risk and Protection</a>	<a href="#">▶ Identifying Your Goals and Motivation</a>
<a href="#">▶ Changing Behavior</a>	<a href="#">▶ Sick Days</a>
<a href="#">▶ Checking Blood Glucose and A1C</a>	<a href="#">▶ Staying Motivated</a>
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# Cardiovascular Risk and Protection

People with diabetes need to take extra care to manage their risk for heart disease compared to those who don't have diabetes. That's because people with diabetes are twice as likely to have a heart attack or stroke as those who don't have diabetes. In this module you'll learn ways to make protecting your heart a part of your everyday life.

## Key Points

- Diabetes puts you at increased risk for a heart attack or stroke.
- Eating healthy, staying physically active, and managing your ABC's (A1C, blood pressure, and cholesterol) can reduce your risk of heart disease and stroke.
- Several diabetes medicines have been shown to be beneficial in reducing risks for heart disease.
- Regular checkups are a smart way to care for your heart. This typically includes having your A1C checked, a thorough eye exam, a foot exam, and making sure that your cholesterol levels and blood pressure are where they should be for you.

## What You Need to Know:

- Having diabetes puts you at increased risk for having a heart attack or stroke. That's because high blood glucose levels over time can damage your blood vessels and nerves. Plus, many people with diabetes also have high blood pressure, high cholesterol, and are overweight—3 things that increase your chances of getting heart disease.
- Your risk of heart disease and stroke are higher the longer you live with diabetes.
- There are many things you can do to decrease your risk of heart disease, including: eating less saturated fat and more high fiber foods, such as fruits and vegetables, being physically active on a regular basis, and keeping your A1C in target range.
- Managing blood pressure is very important to reduce your risk of heart disease. For most, it means keeping blood pressure below 130/80 mmHg. For some who are at higher risk, the goals may be lower.
- Talk with your healthcare professional and schedule regular checkups. This can help you manage your blood glucose levels and also lower your risk of heart disease. Some diabetes medicines have special benefits in protecting heart health. Find out if you would benefit by using one of those medicines.
- Here are some other ways to care for your heart:
  - **Every 3 to 6 months** have your A1C and blood pressure checked by your healthcare professional.
  - **Once a year**, have the following blood tests: triglycerides and cholesterol (especially HDL and LDL) to check the health of your blood vessels and creatinine to check kidney function. In addition, have a thorough eye exam, which includes getting your eyes dilated so your doctor can see your optic nerve. You should also have a complete foot exam and get a flu shot and other recommended vaccines.

### Helpful Tip:

Managing your weight is very important. In fact, for people with overweight or obesity, losing about 5-7% of your body weight can help. If you need help learning how to eat healthy portions, check out the Diabetes Plate Method module for details.

### Myths vs Facts

**Myth:** If I have diabetes, there is nothing I can do to manage my risk for heart attack or stroke.

**Fact:** You can do many things to reduce your risk, including eating healthy foods, maintaining a healthy weight, exercising regularly, and taking your diabetes medicine(s) as prescribed.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will follow the recommendations for healthy eating and monitor my food portions to maintain a healthy weight.

#### Why It Matters

Managing your weight can help you better manage your blood glucose levels and your heart health.

**2 Action**  
I will talk with my healthcare professional about having routine checkups to reduce my risk of heart disease.

#### Why It Matters

Routine checkups can help alert your healthcare professional to changes in your blood glucose, cholesterol, weight, and other important factors that can impact your heart health.

**3 Action**  
I will be sure to schedule annual eye and foot exams.

#### Why It Matters

Your eyes and feet can be affected by diabetes, which is why it is so important to have them checked by a healthcare professional at least once a year.

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▶ **Changing Behavior**

▶ **Sick Days**

▶ **Checking Blood Glucose and A1C**

▶ **Staying Motivated**

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## Changing Behavior

Now that you're living with diabetes, chances are your diabetes care team has recommended that you change a few of your behaviors. You were probably told to become more active. Learning how to check your blood glucose, take medicines, or measure foods are other changes in behavior healthcare professionals often recommend.

Changing your behavior, even slightly, has the ability to change the course of your diabetes for the better. Even small changes can provide you with positive health benefits. Let's explore what some changes might be and how they may help.

### Key Points

- Changing or starting new behaviors isn't always easy, but with the right support—you can do it!
- Consider how these changes—even the small ones—may make a big difference in your health to help keep you motivated.
- Plan ahead and prepare for situations that can get in your way of changing your behavior by thinking of ways to overcome them.

### What You Need to Know:

- Changing behaviors may be a challenge. This is why it is often a good first step to think about some of the changes you need to make and how they can help.
- Breaking down the behavior you want to change into smaller steps will make it easier. Be as specific and realistic as possible. Instead of thinking about something broad and vague such as exercising more, break it down into each of the steps you might need to take to get to where you want to be, such as: I will get new sneakers or I will walk for 10 minutes today.
- Situations like holiday dinners or overnight trips might make it trickier to follow your meal plan. Making a plan that includes tips for handling things in advance is often helpful.
- Reach out to your family, friends, and diabetes care team for support. They can help motivate you and encourage healthy changes.
- Plan ahead and think about the things that trip you up and how you can either avoid or overcome them.

### Helpful Tip:

Focus on the benefits of changing unhealthy behaviors. When you see the benefits, you may see fewer obstacles. Don't try to change too many behaviors at once. That can be overwhelming and set you up for failure. You may even want your family members to join you as everyone can benefit from these healthy changes. Make a list of the behaviors you need and want to change, and try to tackle one each week.

### Myths vs Facts

**Myth:** Knowing that you need to make healthy changes should be enough to get you started.

**Fact:** Not true. It helps if you first understand how these changes can help improve your health. Seeing the big picture can be very motivating. Then, think of ways to make these changes doable.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will pick 1 health change that I can try today.

**Why It Matters**  
Starting slow may increase your chances of success.

- 2 Action**  
I will identify 1 situation that gets in the way of my diabetes care.

**Why It Matters**  
Anticipating or avoiding obstacles that get in the way of keeping you on track can help you be better prepared for them.

- 3 Action**  
I will tell the people on my diabetes care team what I need from them.

**Why It Matters**  
The more support you can get in managing your diabetes, the easier it may be to manage it.

**Next Topic**

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## Checking Blood Glucose and A1C

An important part of caring for your diabetes is checking your blood sugar (or blood glucose). Glucose, which is the main sugar found in your blood, comes directly from the foods that you eat and are your body's energy source. It is also important to know the results of your A1C blood test. Your A1C test results can give you a picture of where your blood glucose levels—on average—have been over the past 2 to 3 months.

Keeping track of both your blood glucose and A1C is called, “monitoring.” Monitoring is key because it gives you the information you need to know where your blood glucose levels are and where they might be headed. It is a good indicator for how the diabetes treatment plan is working. It's like a GPS for your diabetes management. This information will help guide you and your diabetes care team to better customize your diabetes care plan.

### Key Points

- Monitoring your blood glucose—at home with a meter and at the office of your healthcare professional to check your A1C—is an important part of managing your diabetes.
- Blood glucose can also be monitored with a device called a continuous glucose monitor (CGM) that tracks blood glucose levels all day and night. It works with a tiny sensor put under the skin usually on your belly or arm.
- Your blood glucose levels provide important information to your diabetes care team that may require adjustments to your current care plan.
- Studies show that keeping your A1C below 7% may reduce your risk of some diabetes-related concerns, such as eye, kidney, or nerve problems.

### What You Need to Know:

- You may feel fine even when your blood glucose levels are above target. This is why monitoring your blood glucose is so important.
- There are 2 ways to monitor your blood glucose:
  - Having an A1C blood test at your healthcare professional's office
    - These results tell you an average of how your blood glucose levels have been during the past 2 to 3 months.
  - Checking your blood glucose at home using a meter or continuous glucose monitor (CGM) on a daily basis. A CGM tells you the amount of time your blood glucose is within the target range set by your diabetes care team. Since everyone is different, your healthcare professional may specify that you check before or after meals.
    - Be sure to keep track of your blood glucose results and share them with your healthcare professional at your visits. The patterns of highs and lows can help guide any changes in your medicine that need to be made.
    - Ask your healthcare professional to recommend a meter or CGM that is covered by your health plan. This may save you money on test strips and lancets.
- Your diabetes care team will use your blood glucose results to make any changes to your care plan, including your medicines, eating plan, and physical activities.
- For most people, when you wake up and before meals, your blood glucose levels should be between 80 mg/dL and 130 mg/dL. One to 2 hours after meals, your levels should be less than 180 mg/dL. Your recommended targets may be different.
- Keeping your A1C levels below 7% has been shown to help reduce your risk of some common diabetes-related problems (eye, nerve, or kidney problems). It can also impact your cardiovascular system, foot health, and even your dental health.

### Helpful Tip:

Ask your healthcare professional what your target blood glucose and A1C numbers should be. This may help you stay on track.

### Myths vs Facts

**Myth:** Having high blood glucose levels is bad.

**Fact:** Your blood glucose levels aren't good or bad. They simply provide information about how well your diabetes care plan is working. Most people will have blood glucose that falls above or below range some of the time. The goal is to increase the amount of time it falls within the goal range.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
At my next visit, I will ask my healthcare professional what my target blood glucose range should be.

#### Why It Matters

Knowing your blood glucose targets may help you know if you need to make changes to your diabetes care plan.

- 2 Action**  
I will ask my health insurance company what their “preferred” meter or CGM is.

#### Why It Matters

Using a meter that is covered by your insurance may help you save money on testing supplies.

- 3 Action**  
Every day this week, I will check and log my blood glucose levels as often as my healthcare professional recommends.

#### Why It Matters

Checking your blood glucose levels lets you know how well your diabetes is being managed.

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## Creating a Plan You Can Stick With

Managing your type 2 diabetes may seem puzzling at first. In fact, it is a lot like putting the pieces of a puzzle together. One piece of the diabetes management puzzle is eating healthy and understanding the importance of portion control. Being active—and staying active—is another piece.

Then, of course, taking your medicine and monitoring your blood glucose levels are additional pieces. While each part of your diabetes management has its own challenges, putting all these pieces together and fitting them into your daily routine may seem especially tricky. This is why you need to have a plan.

### Key Points

- Try to make a plan that can work for you long term. If it doesn't seem to work, make a new plan.
- Choose short- and long-term goals that are realistic for you.
- Reach out to friends, family, and even your diabetes care team for support.

### What You Need to Know:

There are 6 key steps to making a plan that will work for you—now and in the future.

#### 1. Take the first step.

Think about what's already working for you and use this as your starting point. It may be easier to make changes slowly.

#### 2. Be realistic.

Set yourself up for success by choosing goals that seem realistic to you. Start small and build on your success. For example, consider taking a walk after dinner a few nights a week. Think about what will realistically fit into your life.

#### 3. Be prepared for obstacles.

Life sometimes gets in the way of even the best plan. Think about how you might deal with obstacles. Reach out to someone on your diabetes care team for tips.

#### 4. Focus on the positive.

Following a plan may be tricky at first. Find ways to reward yourself for all the positive changes you've made. Be kind to yourself if you have a slip and move on.

#### 5. Find people to support you.

Consider joining a support group—either live or online. Share your plan and goals so you can get support when needed. You may also want to gather your friends, family, and even coworkers around you. Plus, your healthcare professional and others on your care team are also there with tips and words of encouragement.

#### 6. Track your progress.

People who track their progress—and yes, even their missteps or failures—may be more likely to stick to their plan. Tracking successes can help boost your confidence. Tracking slips can give you clues about obstacles that are likely to get you off track. Figure out ways to avoid these obstacles, or ask your support team for tips, and you may be able to prevent future slips.

### Helpful Tip:

Don't beat yourself up if you slip. It happens. Instead, try to find the lesson to be learned and prevent the next slip.

### Myths vs Facts

**Myth:** Scaring yourself about diabetes will get you to do what you need to do.

**Fact:** Fear can actually get you stuck and prevent you from reaching your goal. You may find it more helpful to focus on all the positive things you're doing to manage your diabetes and reward yourself. Build upon your success!

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will choose 1 thing that motivates me to take care of myself and manage my diabetes.

#### Why It Matters

Reminding yourself of the deeper reasons for managing your diabetes can help keep you motivated.

**2 Action**  
I will choose 1 person who supports my healthy efforts.

#### Why It Matters

This person can help you stay on track when you're feeling less confident or less motivated.

**3 Action**  
I will find a paper tracker, smartphone app, or wearable device to help me keep track of my healthy behaviors this week.

#### Why It Matters

Logging your eating, physical activity, and blood glucose is important for maintaining your health and managing your diabetes. Finding a system that works for you is key.

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## Coping with Stress

Most people have stress in their lives. The challenges that you and your family face living with diabetes can add to that stress. This stress can sometimes lead to depression, which is something that people with diabetes may be at higher risk for developing.

Additionally, coping with the unique stress that COVID-19 brings (such as isolation and added concerns about one's health) can add to these stress levels. Fortunately, there are things you can do to better handle how you cope. This topic will educate you about how stress affects your health and offer tips for managing it better.

### Key Points

- Stress can elevate your blood glucose levels. Sometimes, it can lower it and result in low blood glucose—if you're too stressed to eat than skip a meal.
- Find ways to cope with stress, whether it be leaning on your network of supportive family and friends, going for a walk, doing yoga, or reading a relaxing book.
- It's worth noting some of the common symptoms of depression, which include loss of interest or pleasure in doing things you typically enjoy, trouble sleeping or sleeping more than usual, and eating more or less than usual. If you have any of these symptoms or notice them in a friend or family member, talk with your healthcare professional. There are numerous things one can do to help cope with depression and you are not alone.

### What You Need to Know:

- Stress may directly affect your blood glucose levels. It can either raise or lower blood glucose levels. Here's why:
  - When you're in a stressful situation—maybe an argument with a friend—stress hormones, such as adrenaline, are released. This causes blood glucose levels to rise.
- Feeling isolated or “different” because of your diabetes can be stressful, too. Sometimes, this type of stress may make you want to skip a meal, but don't. A skipped meal could lead to low blood glucose.
- The day-to-day management of diabetes can add to your stress. Remembering to take your medicine(s), checking your blood glucose levels, eating healthy, and being active can add up. Predicting obstacles and planning ahead can help you feel like you are better able to manage things.
- Find healthy ways to cope with stress, such as deep breathing, meditation, or yoga.
- Check blood glucose more often when you are feeling stressed and see how it affects you.

### Helpful Tip:

Getting support from your friends, family, an online support group, or your diabetes care team can help you cope with stress. There may be times when it is helpful to talk with a mental health professional, especially if you're experiencing signs of depression. Ask your healthcare professional for a referral if you need one and remember that you are not alone. Your mental health is as important as your physical health.

### Myths vs Facts

- Myth:** If I were stronger, I would be able to handle stress better.
- Fact:** The only kind of strength that helps with the management of stress is a strong support system. Don't forget to reach out to family, friends, or your diabetes care group for help in managing stress.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will identify what life stresses make it harder for me to manage my diabetes.

**Why It Matters**  
Being aware of how life gets in the way may help you prepare for it and possibly even change it.
- 2 Action**  
For the next week, I will focus on how to make the hardest part of managing diabetes easier.

**Why It Matters**  
You can reduce stress by talking with your diabetes care team or others in your support system. They may be able to help you find ways to change the way you look at stressful situations or change the environment that's causing stress.
- 3 Action**  
This week, I will try 1 strategy to help manage stress—taking a walk, spending time with friends, and watching a movie.

**Why It Matters**  
Stress is a fact of life. Having tools to help manage stress may help.

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## Finding Support

Having the support of friends and family is important for everyone. But it's especially important for people with type 2 diabetes. In fact, studies show that one of the best predictors of how well someone takes care of their diabetes is the amount of support they have. A strong support network can make it easier to cope with the ups and downs of managing diabetes. How can you find the support you need? This topic offers some tips.

### Key Points

- Friends and family are usually eager to help, but they aren't mind readers. Talk with them about how they can support you in your efforts to manage your diabetes.
  - Maybe you just want to know that they're there for you when you want to talk.
  - They might be a great activity buddy—someone to walk with or engage in some sort of physical activity: yoga, meditation, or a group dance class.
  - Helping you keep your home food friendly and free of the foods you want to limit eating is another way for them to help.
  - People with diabetes can benefit in many ways by engaging with each other. One way to do so is to seek out peer-support communities. There are many diabetes online communities that offer support, share knowledge, and share practical advice for people with and affected by diabetes.
- Make a list of questions as they arise to ask your diabetes care team during your next visit.

### What You Need to Know:

- Your friends and family probably want to help, but they might not know what type of help you need. Do you need emotional support? They may need guidance to focus on the positive instead of pointing out what they think you are doing wrong. Do you need support to get certain things done, such as grocery shopping or keeping track of medical test results or appointments? Having a heart-to-heart talk with them is the first step to getting the support you need.
- Your diabetes care team is another source of support and may include a family doctor, endocrinologist, diabetes care and education specialist, nurse, pharmacist, dietitian, and other healthcare professionals. Members of your team can answer questions or concerns you may have about managing your diabetes.
- Puzzled by your blood glucose numbers? Feeling nervous about a new part of your care? Need a written copy of recommendations to help you understand? Your diabetes care team is an excellent source of information and support.

#### Helpful Tip:

Many of us find it difficult to ask for help. Understanding that those who care about us—our friends and family—may want to help can make starting a conversation easier. After all, wouldn't you want to help them if they need support?

#### Myths vs Facts

**Myth:** Only weak people need support.

**Fact:** Smart people know that going alone is never the best way to handle difficulties. We all need support from time to time.

### Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will let my family know the kind of support I need to help me manage my diabetes.

**Why It Matters**  
Your family may not know that you need or want their support and how to best offer it. Letting them know is the first step in making them part of your support network.
- 2 Action**  
I will ask someone I trust, my significant other, or a friend or family member to come to my next diabetes appointment.

**Why It Matters**  
Having someone with you to take notes and remind you of questions you want to ask can help. Being part of the appointment also helps the person understand the challenges you are facing.
- 3 Action**  
I will call my healthcare professional when I have a question about my blood glucose readings.

**Why It Matters**  
Understanding which factors affect your blood glucose numbers is important.

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# Identifying Your Goals and Motivation

Your diabetes is different from anyone else's—with uniquely individual reasons for working on healthy behaviors, staying motivated and following a diabetes care plan and goals. Once there's clarity about what your goals and motivations are, it's easier to take charge and better manage living with type 2 diabetes.

## Key Points

- Identify your motivating reasons or the “why” for following your diabetes care plan and for achieving your best possible health. Thinking about these reasons and their importance can actually help you stay motivated. Jot them down to serve as a concrete reminder. You may want to put this list somewhere visible to help keep you on track.
- Know your goals. Be as specific and realistic as possible. Little steps can lead to big progress.
- Think about the obstacles you face and make a plan for handling each one. Feeling prepared can be very empowering.

## What You Need to Know:

### Here are a few tips for setting your diabetes care goals:

1. Start by talking with your healthcare professional and teaming up with them to set specific and realistic goals. Discuss your “why” so your motivating reasons are clear.
2. Make your goals specific. For example, “I will check my blood glucose first thing every morning.”
3. Set no more than 1-2 goals at a time. If you try to do too much, you're less likely to succeed.

### Here are some tips for finding your “why” and for getting and keeping you motivated:

1. Each of us is motivated by different things. Here are a few that might also work for you:
  - I want to be healthy so that I can be there for my family.
  - I know someone who had problems as a result of not taking care of their diabetes. I don't want that to happen to me.
  - I want to feel better and have more energy.
2. Think about writing down your main motivations and putting them someplace where you'll see them every day.
3. When you reach a goal, think about how it makes you feel. Pretty good, right? Hold onto that feeling and use it to keep you motivated to move ahead.

### Helpful Tip:

Write down your goals and your motivations. Maybe it's more than just getting and staying healthy for yourself, but for your spouse and other family members, too. Use a magnet to place them on your refrigerator. This can help ensure that you see it every day—a few times each day!

### Myths vs Facts

**Myth:** I have a reason to feel motivated today and will use it to stay motivated in the future, too.

**Fact:** Just as your diabetes treatment goals may change with time, the same is true for your reasons to stay motivated.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action** Write down the top 3 motivations for making healthy changes.

#### Why It Matters

You may be more likely to succeed when you identify what motivates you. Remind yourself of this motivation when things get tough.

- 2 Action** I will reward myself for sticking to my goals and achieving them this week.

#### Why It Matters

Learning how to stick to your goals will teach you what may help you maintain healthy changes long term.

- 3 Action** For the next week, I will try an exercise routine that I can manage.

#### Why It Matters

Exercise helps your body become more sensitive to your own insulin and use it more effectively.

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# Sick Days

When you have diabetes, it's important to take good care of yourself when you're sick. That's because any illness, injury, recent surgery, or even having a tooth pulled may cause your blood glucose levels to rise. This topic will provide you with important information about how to take care of yourself during sick days.

## Key Points

- Your body produces stress hormones when you're sick, which can raise your blood glucose levels and increase the amount of insulin you need.
- Being sick may let you take off from work or school, but NOT from checking your blood glucose and taking your diabetes medicine.
- Get plenty of rest, drink lots of sugar-free fluids, and call your healthcare professional with any questions you may have if you're feeling worse or if your blood glucose levels change.

## What You Need to Know:

- When you're sick, your body makes stress hormones to fight off the infection. These stress hormones may also cause your blood glucose levels to rise, which can increase your insulin requirements.
- A sick day for people with diabetes can include any of the following:
  - Colds
  - Flu
  - Nausea or vomiting
  - Infection
  - Dental work, like having a tooth pulled
  - Stress
  - Injury
  - Surgery
- The "sick day plan" will help prevent your blood glucose levels from going too high, which could make it harder for your body to fight infections and may lead to serious medical problems if it's not addressed. Here's what it includes:
  - **Always take your diabetes medicine**—unless your healthcare professional tells you not to.
  - **If you're unable to eat solid food**, alternate between sugar-free drinks (diet soda, seltzer water, tea) and drinks that contain sugar (juice, regular soda) for the next hour.
  - **Check your blood glucose more often than usual.** For a mild illness, such as a cold, check your blood glucose several times a day. If you have a more serious illness, like the flu, check it more often because blood glucose levels may rise quickly.
  - **Drink plenty of fluids.** Try to drink at least 6 to 8 ounces of sugar-free, caffeine-free drinks every hour you're awake. This can help you stay hydrated, which is important if your blood glucose is high.
  - **Rest and keep warm.** Don't exercise and, if possible, try to have someone take care of you.
  - **Call your healthcare professional.** If your blood glucose is 250 mg/dL or higher for 2 blood glucose readings in a row, call your healthcare professional to let them know. If you have type 1 diabetes or take insulin, you may also have to check for ketones. Be sure to call your healthcare professional for further direction.

### Helpful Tip:

Follow the recommended vaccination schedule for things like the flu, pneumonia, shingles, and COVID-19. If you're sick, reach out to your support team. See if a friend or family member might be able to help take care of you while you're not feeling well.

### Myths vs Facts

- Myth:** It's okay to stop taking your diabetes medicine when you're sick.
- Fact:** No! Your blood glucose levels may go up when you're sick, even if you're not eating much. That's why it's important to continue taking your diabetes medicine unless your healthcare professional tells you otherwise.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
The next time I'm ill, I will call my healthcare professional if I'm unsure of what to do.

**Why It Matters**  
Constant nausea, diarrhea, vomiting, or being unable to keep fluids down, low blood glucose levels, or levels above 250 mg/dL twice in a row, abdominal pain, or fever—are all good reasons to call your healthcare professional. They can best advise you about what to do.
- 2 Action**  
I will make sure to drink 8 ounces of sugar-free beverages every hour the next time I'm ill.

**Why It Matters**  
Staying well-hydrated during an illness may help prevent dehydration.
- 3 Action**  
I will check my blood glucose levels several times a day and record them every time I am sick.

**Why It Matters**  
Checking your blood glucose levels more often when you're sick is important.

**Next Topic**

- [▶ Cardiovascular Risk and Protection](#)
- [▶ Identifying Your Goals and Motivation](#)
- [▶ Changing Behavior](#)
- [▶ Sick Days](#)
- [▶ Checking Blood Glucose and A1C](#)
- [▶ Staying Motivated](#)
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## Staying Motivated

We've all started something with great enthusiasm only to find that we become less motivated as time goes on. Staying motivated with your diabetes management plan is no different. Let's face it, keeping up with your physical activity, medication, and glucose monitoring can be tricky. Not to mention, staying on track with the foods you eat and their portion sizes. So how can you stay motivated so that these new behaviors become habit and help ensure your success? Keep reading for some helpful suggestions and tips.

### Key Points

- Staying motivated is important to keep you on track with your diabetes management plan.
- Learning the best ways to keep yourself motivated is a smart way to help ensure your success.

### What You Need to Know:

**Here are 6 ideas that you can use when you're finding it tough to stay on track.**

#### 1. Review your goals.

It's easier to stay motivated if your goals are realistic. Look at your goals and see if they need a little fine tuning from time to time. For example, instead of promising to be active for a half hour every day, it's okay to break your activity time into three 10-minute segments. This may be easier for you to stick with it, and may also help boost your confidence to continue this and other pieces of your diabetes management plan.

#### 2. Focus on your long-term goals.

Thinking about your long-term goals may make it easier to stay motivated and on track. For example, staying healthy to stay actively involved with your grandchildren may provide the right motivation for some.

#### 3. Reward yourself.

Managing your diabetes can be a complicated task, at times. Be sure to reward yourself for keeping on track. Buy yourself some fresh flowers. Think of other things you can do to congratulate yourself on your achievements. Rewards can go a long way to keeping you motivated.

#### 4. Adjust your environment.

If you're trying to eat healthy, stock your refrigerator and cabinets with healthy foods and snacks. Place unhealthy foods out of reach or remove them completely.

#### 5. Track how well you're doing.

Keeping track of all that you're doing to help manage your type 2 diabetes can help you stay motivated. Especially when you see the progress you're making! These records may also help your healthcare professional make better informed decisions.

#### 6. Turn to your support network.

Your friends, family, and your diabetes care team can help cheer you on when you're losing motivation. Great support can even be found from peers in online diabetes communities. Share your frustrations about sticking with your plan. They may have ways to reinvigorate your motivation.

### Helpful Tip:

Feeling less motivated? Don't beat yourself up. It happens to everyone. It may help to step back and look at the bigger picture. Keep in mind that a temporary slip up doesn't mean you're going to automatically slide downhill. Remember, tomorrow is a new day!

### Myths vs Facts

**Myth:** All I need is willpower to successfully manage my diabetes.

**Fact:** Willpower is great, but you'll also need motivation, support, realistic goals, and a plan for managing obstacles that come your way.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will identify what is giving me the most trouble managing my diabetes.

**Why It Matters**  
You have to first identify the problem before you can find a solution.
- 2 Action**  
I will identify the things in my life that get in the way of my efforts.

**Why It Matters**  
If you know what's tripping you up, you can figure out what to change.
- 3 Action**  
When I start to get off track, I will call my healthcare professional or talk to others in my support network about how to face the challenge.

**Why It Matters**  
No need to go it alone. Your healthcare team may have some suggestions or may be able to make some changes in your management plan to make it easier for you to stay on track.

**Next Topic**

- [▶ Cardiovascular Risk and Protection](#)
- [▶ Identifying Your Goals and Motivation](#)
- [▶ Changing Behavior](#)
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# The Emotional Side of Diabetes

Living with diabetes often comes with a lot of changes. You may need to change the way you eat and become more aware of portion sizes. Learning how to become more physically active may be another change for you. You may also need to add some important elements to your daily routine, like checking your blood glucose and remembering to take your medicine.

Incorporating all these changes into your life can be challenging. For many, it can feel like diabetes is controlling you rather than the other way around. This topic looks at ways to manage all these changes and avoid *diabetes distress* or *burnout*.

## Key Points

- Diabetes distress is the emotional response some people have to the burdens of living with diabetes. It is when living with diabetes can feel overwhelming.
- Diabetes burnout can happen when you feel that your efforts don't matter and can sometimes make you feel like a failure.
- Depression may be another struggle for people with diabetes. In fact, people with diabetes are twice as likely to develop depression than those without diabetes.
- If you're feeling overwhelmed, worried, distressed, or depressed, reach out to your support group for help.

## What You Need to Know:

- Managing diabetes can be tough and require a lot of effort all day, every day. Sometimes, even when you do the same things 2 days in a row, your blood glucose levels may be different.
- The demands of managing diabetes can wear people out. It is common to feel diabetes distress—or feel overwhelmed from time to time. Diabetes burnout is a term used to describe feeling that your efforts don't matter. It can make you feel frustrated and sometimes even make you feel like a failure.
- People with diabetes are 2 times more likely to become depressed than those without diabetes.
  - Symptoms include feeling sad or blue, more often than not. You may notice that you're no longer enjoying the things you once did.

### Helpful Tip:

If you're feeling overwhelmed or burned out from managing your diabetes, reach out to your support group! You don't have to cope with these feelings alone. Connecting with your family, friends, and diabetes care team can be a great help.

### Myths vs Facts

**Myth:** I must be weak if I'm feeling this overwhelmed and depressed.

**Fact:** Absolutely not true! Managing diabetes can be tough on even the strongest of us. If you're feeling frustrated, overwhelmed, or sad—reach out! You've got friends, family, and a diabetes care team who are there for you and can help.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will pick 1 of the things that make me feel frustrated about managing my diabetes and discuss it with someone in my support network.

**Why It Matters**  
It helps to be aware of your feelings, especially as they can interfere with your diabetes care.
- 2 Action**  
I will acknowledge my achievements in managing my diabetes.

**Why It Matters**  
Reminding yourself of how good you feel when things are going well is an important way to stay motivated.
- 3 Action**  
For the next week, I will try to be aware of any negative thoughts about managing my diabetes and what triggers them.

**Why It Matters**  
It's important to understand what situations spark these negative thoughts and feelings about managing your diabetes. Being aware of them may help you overcome them easier.

**Next Topic**

- ▶ Cardiovascular Risk and Protection
- ▶ Identifying Your Goals and Motivation
- ▶ Changing Behavior
- ▶ Sick Days
- ▶ Checking Blood Glucose and A1C
- ▶ Staying Motivated
- ▶ Creating a Plan You Can Stick With
- ▶ The Emotional Side of Diabetes
- ▶ Coping with Stress
- ▶ Understanding Tests for Diabetes Management
- ▶ Finding Support

# Understanding Tests for Diabetes Management

Keeping your blood glucose in target range is a key objective for managing type 2 diabetes. That's why it's important for you to monitor and track your blood glucose levels. This will help your healthcare professional know how well your diabetes management plan is working and if you need to change or add to the medicines you're taking. Since measuring blood glucose levels is now a part of your life, it's helpful if you understand the tests and the language used to describe your results.

## Key Points

- There are different ways to monitor your blood glucose levels:
  - An A1C blood test, which is done at your healthcare professional's office, is perhaps the most important test as it helps determine how well your diabetes is managed over time.
  - Doing it yourself with a blood glucose meter, which is often called a blood *glucose* meter. (Glucose is another term for sugar.)
  - Wearing a device called a continuous glucose monitor (CGM), which tracks blood glucose throughout the day.
- Your blood glucose is always changing. Ideally, for many nonpregnant adults, it should be between 80-130 mg/dL before meals and below 180 mg/dL after meals.
  - The numbers are typically lower in the morning when you first wake up. This is called your *fasting plasma glucose* or FPG, for short. It's called this because you haven't had anything to eat for some time.
  - Your blood glucose levels are higher 1 to 2 hours after you have a meal. This is called *postprandial glucose* or PPG. The word *prandial* refers to meals.
- Monitoring blood glucose helps to show how well the diabetes medicines and treatment plan is working. It also helps avoid short-term problems like blood glucose going too high or too low.

## What You Need to Know:

### What is an A1C test?

- It's a blood test that is done at your healthcare professional's office.

### What does it do?

- It takes a 2-to-3-month average of your blood glucose levels.
- It measures the amount of glucose (sugar) that attaches to your hemoglobin, which is part of your red blood cells. The more glucose that attaches, the higher your A1C will be.

### How often will I need an A1C test?

- An A1C blood test is usually done 2 to 4 times a year. If you've been prescribed a new medicine, your healthcare professional may want to recheck your A1C in 3 to 6 months to see how well it's working.

### What's a good A1C test score?

- For people who don't have diabetes, their A1C can range from 4% to 6%.
- The goal for most people with diabetes is to have their A1C be less than 7%. Your healthcare professional can determine the A1C target that's right for you.
- An A1C that's above 7% is considered high for most people. Studies show that as your A1C levels go up, so does your risk for having problems related to diabetes like heart disease, kidney disease, and nerve damage.

### What is an at-home blood glucose test?

- This is how you can keep track of your blood glucose on a daily basis. All you need is a small device called a glucose meter.
- Your healthcare team can help you learn how to use your meter, but it's best to talk with your health insurance carrier to learn which meter(s) they cover. Using their preferred meter can save you money.

### How does it work?

- After washing your hands, choose a finger to use. (You'll use a different finger each time to help avoid soreness.) With your hand below your waist, you'll use your lancet (a small broad-edged tool with a sharp edge) to "prick" the tip of your finger.
- Using a blood glucose strip, fill the strip's target area with blood from your finger.

### What are target blood glucose levels?

- Before meals, a usual target for most people is between 80 and 130 mg/dL.
- Two hours after meals and you should be below 180 mg/dL.
- At bedtime, between 90 and 150 mg/dL is common.

Your healthcare professional may suggest that you write down your blood glucose levels in a book or run reports. This can help you find patterns. It will also be helpful to share your results with your healthcare professional at your next appointment. If your numbers fall below 70 mg/dL or go above 250 mg/dL, *call your healthcare professional*.

### What is a CGM (continuous glucose monitor)?

- A CGM is a wearable tool that makes it easier to track blood glucose over time. There are different kinds of CGM and ways to use it. Talk with your healthcare professional to see if it's right for you.

### How does it work?

- A small wearable sensor is worn (usually on the belly or arm) and measures glucose in the fluid under your skin. It transmits the readings to a device (such as your phone) where you can view the numbers.

Please refer to **Checking Blood Glucose and A1C** for additional information.

**Helpful Tip:**  
Use this handy chart to see how your A1C translates into the blood glucose levels like you see on your monitor. This will help you have a sense of how your daily blood glucose relates to your long-term diabetes management.

If your A1C is this:	Your estimated average glucose (eAG) is this:
12%	298 mg/dL
11%	269 mg/dL
10%	240 mg/dL
9%	212 mg/dL
8%	183 mg/dL
7%	154 mg/dL
6%	126 mg/dL

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
This week, I will find out my most recent A1C result

**Why It Matters**  
Knowing your A1C lets you and your healthcare professional see how well your diabetes medicine is working.
- 2 Action**  
I will check and log my blood glucose as recommended by my healthcare professional.

**Why It Matters**  
Checking your blood glucose with your meter helps you see how well your diabetes care plan is working for you.
- 3 Action**  
If my recent A1C result is not on target, I will talk with my healthcare professional about steps I can take to help lower it.

**Why It Matters**  
Your diabetes care plan, which includes the medicines you take, food choices, and activity, may need to be changed to help you get your A1C to your target goal.

**Next Topic** ▶

# My Diabetes Learning Path

This program helps you personalize your learning needs at your own pace. It allows you to choose the information you need—from useful tips on healthy eating, being active, taking medicine, and staying on track—to support the diabetes management goals that you work with your healthcare professional to set.



[View All](#)

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# Eating Modules List

 **Basic Carbohydrate  
Counting**

 **Reading a Nutrition  
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# Moving Modules List

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 **Identifying Your Goals  
and Motivation**

 **Knowing Your Numbers**

# Basic Carbohydrate Counting

Healthy eating is as much a part of managing your diabetes as taking your medicine. What you eat, when you eat, and how much you eat all play a role in managing your blood glucose (sugar) levels. For example, your body needs carbohydrates for energy, much like a car needs gas to run. Once eaten, carbs turn into sugar which can raise your blood glucose. Carbohydrate counting is important to managing your type 1 diabetes because of the big impact carbs can have on your blood glucose levels.

## Key Points

- Carbohydrates are found in plant foods (fruit, vegetables, grains, starches, beans, and sugar). Milk and yogurt, while not plant foods, also contain carbs.
- Carbohydrates come in 3 forms: starches, sugars, and fiber. All starches break down into sugars.
- Counting carbs, or keeping them in balance, is an important step for managing blood glucose. But counting carbs doesn't mean you can't eat the foods that you enjoy. It's all about meal planning.
- The Nutrition Facts label lists total grams of carbs per serving.
- The amount of carbs you need is dependent on factors including your weight, level of exercise, and the medicine that you take.



## What You Need to Know:

- Carbohydrate foods have the most impact or effect on blood glucose. Foods containing mostly protein and/or fat do not increase blood glucose as much as carbs.
- There are 3 main sources of carbs in foods:
  1. Starches, which are found in bread, pasta, rice, cereal, corn, crackers, and some vegetables.
  2. Sugars, which are found in fruit, fruit juices, milk, yogurt, and candies.
  3. Fiber, which is found in fruit, vegetables, whole grains, beans, peas, and nuts.
- Foods that do NOT contain carbs are just as important for you to know. Here are some examples:
  - Proteins, which include meat, poultry, fish, eggs, cheese, and tofu.
  - Fats, which include oil, margarine, butter, mayonnaise, avocado, nuts, and seeds.
  - Foods that are free of carbs include sugar-free gelatin and sugar-free gum.
- Non-starchy vegetables usually have less of an impact on blood glucose. Some of these include carrots, tomatoes, lettuce, green beans, and broccoli.
- Carbohydrates are measured in grams. One serving size (also known as 1 carb choice) contains 15 grams of carbohydrate. Here are some examples of 1 carb choice:
  - 8 ounces of skim milk
  - 1 slice of bread
  - 1 small apple
  - 1/3 cup of light ice cream
- The amount of insulin you take will be based on the amount of carbs you plan to eat. Learning to count them is important to keeping your blood glucose balanced.
- Your diabetes care team can advise you about how many carbs you need each day. This will depend on several different factors including your weight, level of activity, and the medicines that you're taking.

### Helpful Tip:

Look at the Nutrition Facts label on your favorite foods at home. The label lists the total grams of carbs for each serving. Make sure to look at the total grams of carbs and not just the amount of sugar in an item. This is a good way to become more familiar with carb counting.

### Myths vs Facts

**Myth:** If you have diabetes you should avoid all forms of sugar.

**Fact:** Sugary foods tend to be high in carbs (calories and fat, too), so the portion size is often very small. If you plan ahead and save them for a special treat, you should be fine.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will find 3 foods at home that are sources of carbohydrates.

**Why It Matters**  
The first step in counting carbs is learning which foods contain them.

**2 Action**  
I will use measuring cups for 1 meal this week to measure out my carb food portions.

**Why It Matters**  
Once you know which foods contain carbs, the next step is knowing how many carbs they contain.

**3 Action**  
I will talk with a dietitian or my healthcare professional about how to balance my meal plan with my insulin.

**Why It Matters**  
Each person should have their own unique food plan designed specifically for them. Take time to learn about how different foods affect your blood glucose and how much insulin you need to keep your blood glucose in target range.

# Reading a Nutrition Facts Label

Knowing how to read and understand a nutrition facts label is important—even if you don't have diabetes. These labels can help you keep track of carbs, fat, and sodium. They also give you information about the percent of your daily value of these things. Reading food labels can help you make healthy choices and better manage your diabetes.

## Key Points

- The serving size is the first thing to review on a food label. It is based on the typical portion of food that is usually eaten. All of the nutrition information on the label (such as calories and grams of carbs) is based on the serving size that is listed. Talk with your healthcare professional to best determine what is right for you.
- The amount of food you eat may be different from the serving size listed. Adjust the numbers on the food label in your calculations based on what you actually eat.
- For most people, looking at the “total carbohydrate” figure is the next most important number to review. Your food plan may be based on a certain amount of carbohydrates at each meal.
- Pay attention to how much fat your food choice contains. Keep saturated fats to no more than a single gram and trans fats to 0 grams per serving.
- Choose foods with at least 3 grams of fiber per serving. These choices can help you feel fuller and eat less.

## What You Need to Know:

There are 5 key areas when reading a nutrition facts label.

- ▶ **Serving size:** Remember that most packages contain more than 1 serving, so be mindful of how much you're choosing to eat and adjust your calculations accordingly.
- ▶ **Saturated fat:** This is the unhealthy type of fat, which may raise your bad cholesterol or what is referred to as LDL-cholesterol (low-density lipoprotein). This is different than HDL-cholesterol (high-density lipoprotein), which is considered good. Try to choose foods that contain no more than 1 gram of saturated fat per serving.
- ▶ **Trans fat:** This is another kind of unhealthy fat, which can also raise your bad cholesterol. For this reason, look for foods that contain “0 grams” of trans fat.
- ▶ **Sodium:** Just because a food doesn't taste salty doesn't mean it's low in sodium. Low-sodium foods have no more than 140 mg of sodium per serving. High-sodium foods include canned foods, luncheon meats, and processed foods.
- ▶ **Total carbohydrates:** This figure combines 2 kinds of carbs—dietary fiber and sugars. Carbs raise blood glucose more than protein or fat. It's important to look at the total amount of carbs in a serving and not just the amount of sugar. Soluble fiber has little effect on blood glucose but can help keep your digestive tract working smoothly. It can also help you feel fuller. Choose foods with at least 3 grams of fiber per serving. It's important to know that carbs raise blood glucose even more than protein or fat.

Nutrition Facts	
8 servings per container	
<b>Serving size</b>	<b>1/2 cup (55 g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>230</b>
<b>% Daily Value*</b>	
<b>Total Fat</b> 8 g	<b>10%</b>
Saturated Fat 1 g	<b>5%</b>
Trans Fat 0 g	
<b>Cholesterol</b> 0 mg	<b>0%</b>
<b>Sodium</b> 160 mg	<b>7%</b>
<b>Total Carbohydrate</b> 37 g	<b>13%</b>
Dietary Fiber 4 g	<b>14%</b>
Total Sugars 12 g	
Includes 10 g Added Sugars	<b>20%</b>
<b>Protein</b> 3 g	
Vitamin D 2 mg	10%
Calcium 260 mg	20%
Iron 8 mg	45%
Potassium 235 mg	6%

\* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

## Helpful Tip:

Pay close attention to the serving size listed on the label. It may be a lot smaller than the portion sizes you've been eating. Use measuring cups and spoons as well as food scales to check your servings from time to time.

## Myths vs Facts

**Myth:** The only benefit of eating foods that are high in fiber is for your digestion.

**Fact:** Fiber helps you feel fuller, which may help you eat less. It also has benefits to helping keep blood glucose and blood fats closer to the target range.

**Nice work! You've finished reading through the information on this topic.**

Next Topic



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will look at the food labels on at least 3 items in my cabinets or pantry and note the 5 important areas.  
**Why It Matters**  
Checking labels may help you learn what to look for to make healthy decisions about what and how much to eat.
- 2 Action**  
Next time I'm at the grocery, I will compare labels on 2 similar food items. After noting the differences, I can then decide which is the better choice.  
**Why It Matters**  
Comparing labels on similar products may help you learn to select healthier options.

- 3 Action**  
I will practice my measuring skills for one day this week, weighing and measuring out all my food portions.  
**Why It Matters**  
Being aware of your portions will help you better manage how much you eat and have more accurate calculations of calories and of carbohydrates—which may affect blood glucose.

# Managing Blood Glucose Around Physical Activity

Being active—whether you’re playing sports, walking your dog, or simply taking a walk with a friend—can often lower your blood glucose. Sometimes, being active can cause your blood glucose to drop too low. In this module, we’ll learn how people with type 1 diabetes can enjoy being active while keeping their blood glucose at a safe level.

## Key Points

- Talk with your healthcare professional before starting any exercise program. They will be able to tell you how often to check your blood glucose so that you remain safe while adding activities to your life.
- Always keep snacks on hand in case your blood glucose drops too low.
- Check your blood glucose before and after being active.
- A good rule of thumb is to eat 15 grams of carbs for every 30 minutes of activity. Children may only require 5-15 grams of carbs, depending on their age and size. Be sure to discuss this with your child’s healthcare professional.

## What You Need to Know:

- Being active can cause your blood glucose level to drop. This can happen right after you exercise or play sports and even as long as 48 hours later. It is recommended that you exercise about 150 minutes each week. This can even be broken down to as little as 10 minutes twice a day, which may be more manageable for you.
- Always carry quick-acting carbs with you—juice, non-diet soda, sweets, or glucose tablets—so that you’re prepared for a low blood glucose event. Be sure to replace them after you’ve eaten them. Make sure that your support teams (friends, co-workers, and other helpers, such as a school nurse or sports coach) have extra snacks on hand if needed.
- The American Diabetes Association recommends that people with type 1 diabetes check their blood glucose before and after being active. Keeping your insulin dose balanced is important and can even be impacted by doing chores around the house.
- If you notice a big change in blood glucose after an activity, let your healthcare professional know so that you can make a plan for the future.
- For every 30 minutes of activity you do, eat a snack that contains 15 grams of carbohydrates. It is also suggested to have a snack if your blood glucose is below 100 mg/dL before activities or less than 90 mg/dL after activities.
  - Some snacks that contain 15 grams of carbs include:
    - 1 small piece of fruit
    - 4 ounces of fruit juice
    - 6 saltines
    - 1 mini box of raisins
    - 4 glucose tablets
- Sometimes being active can cause blood glucose to rise. This can happen for several reasons, including:
  - Your blood glucose may be too high before starting your activity
  - You may have eaten too much food before being active
  - Your diabetes medicine may need some adjusting
  - Too much adrenaline was released by being active or due to stress



## Helpful Tip:

Talk with your healthcare professional before starting any new activities. They will be able to advise you about when to check your blood glucose and when to eat in order to keep your blood glucose levels within a healthy range. It may also be suggested that you decrease your insulin dose on days you are more active.

## Myths vs Facts

**Myth:** All physical activities cause your blood glucose to drop.

**Fact:** Some do, but others may not. Check with your healthcare professional to ensure the right balance between physical activity and your insulin dose.

**Nice work! You’ve finished reading through the information on this topic.**

**Next Topic** ▶

Now you’re ready to act and start incorporating these new healthy habits into your life. This will help you practice what you’ve learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
Before participating in any sports or physical activities, I will have a plan for when and how often to check my or my child’s blood glucose.

### Why It Matters

The only way to help know how being active is affecting your diabetes or your child’s diabetes is to check blood glucose before and after being active.

**2 Action**  
I will choose a 15-gram carb to treat low blood glucose.

### Why It Matters

Thinking about treating low blood glucose ahead of time gets you one step closer to having treatment on hand when needed.

**3 Action**  
I will be sure to wear medical identification.

### Why It Matters

Medical identification (such as an ID bracelet) allows people to know that you—or your child—have type 1 diabetes and the kinds of medicines that are being taken. This is especially important if you or your child become disoriented or pass out while being active so that proper treatment is offered quickly.

# Fitting Injections into Your Daily Routine

Being prescribed an injectable medicine, such as insulin, may make some people uncomfortable, scared, and even wonder if they've done something wrong. Needing an injectable medicine is not your fault. It's just another way for your healthcare professional to help keep your blood glucose in target range.

## Key Points

- Your diabetes care team can give you tips for making injections easier, so don't be shy about reaching out.
- Letting your friends and family know that you need to take an injectable medicine to help manage your diabetes may help you feel less concerned about taking your medicine during social situations.

## What You Need to Know:

- There are things you can do to make giving yourself injections easier, such as:
  - Practicing on an "injection pillow"—a soft pad that's used just for this purpose. It's worth noting that the needles used with diabetes medications are small in comparison to traditional hypodermic needles.
  - Trying different injectable diabetes medicines, such as a vial and syringe, a pump, or a pen
  - Ask your diabetes care team about ways to make injections easier. For example, there are prefilled disposable pens that you may prefer.
- Talk with your friends and family about your need to take an injectable medicine to help manage your diabetes. This may help lessen your concerns about having to take your injectable medicine in a social situation, like during a family gathering.



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## Helpful Tip:

Focus on the positive. Ask your healthcare professional or pharmacist about how your injectable medicine is going to help keep your blood glucose in target range.

## Myths vs Facts

**Myth:** Injections are always painful.

**Fact:** There are ways and options to make injections easier, which is why it's important to talk with your diabetes care team. They can give you some helpful tips.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will practice injecting into an injection pillow.

### Why It Matters

Practicing with an injection pillow can help you learn how to give yourself an injection safely.

**2 Action**  
I will ask my diabetes care team for tips about making injections more routine.

### Why It Matters

Reaching out to experts always makes sense. They have lots of experience and have learned all sorts of tips they'd be happy to share to make taking your medicine easier.

**3 Action**  
For the next week, I will focus on how taking my injectable medicine is helping me stay healthy.

### Why It Matters

Thinking positively may help you stay on track. It may also help you look at your medicine as an important partner in caring for your health.

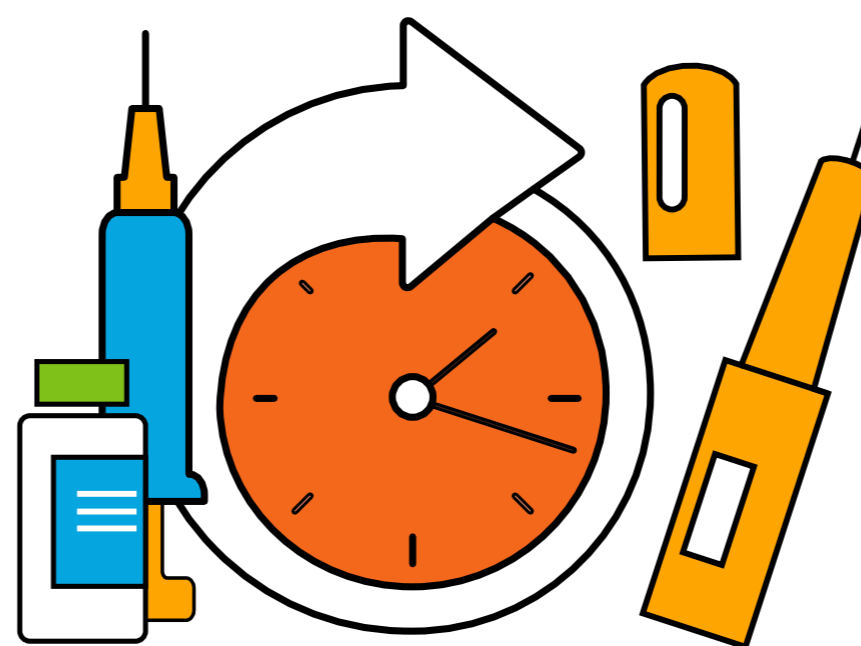
# Long-Acting Insulin

Long-acting insulin, also called background insulin, works to keep blood glucose in target range between meals and during the night. It reaches the bloodstream several hours after injection and tends to lower glucose levels for up to 24 hours.

There are several different kinds of long-acting insulins. It is important to know the specific kind you take and the facts about how it works. This module will help you learn about this important type of insulin.

## Key Points

There are two main types of insulin. One type acts slowly and is called “background” insulin or basal insulin because it works in the background throughout the day and night. The other kind of insulin is called mealtime insulin and is taken before eating.



## What You Need to Know:

- Background insulin is taken once or twice a day at the same time each day. It helps manage blood glucose levels between meals and during the night. It does not need to be taken with food.
- Some background insulin is “long-acting”—meaning it has a duration of action of up to 24 hours and it does not have a peak action time—or a time when it works the hardest. Another kind is called “intermediate-acting” and while it can work for up to 24 hours, it has a peak action time between 4 and 12 hours.
- Often, background insulin is taken with another diabetes medicine—either diabetes pills or a mealtime insulin.
- Premixed insulins are a combination of mealtime and background insulin.
- The recommended dose is different for each person. It is based on several factors including your weight and the level of sugar in your blood.

## Helpful Tip:

- It’s common for your healthcare professional to adjust the dose of your insulin to meet your body’s unique demands. This doesn’t mean there is something wrong. It may just take some time to finely tune your dose to meet your personal needs.
- If using an intermediate-acting insulin (like NPH), a snack may be needed between the lunch and dinner meal to reduce the risk of low blood glucose.
- Long-acting insulin can come in prefilled insulin pens or it can be given using a syringe with a vial of insulin.
- Store opened or used pens or vials of insulin at room temperature, and unopened pens or vials in the refrigerator.
- Don’t use insulin that is past its expiration date.

## Myths vs Facts

**Myth:** There is no risk for hypoglycemia (low blood glucose) with long-acting or background insulin.

**Fact:** Long-acting insulin can still lead to hypoglycemia, and the risk increases if taken with mealtime insulins or with certain diabetes pills (like sulfonylureas).

## Nice work! You’ve finished reading through the information on this topic.

**Next Topic**

Now you’re ready to act and start incorporating these new healthy habits into your life. This will help you practice what you’ve learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
Discuss any problems you may have taking insulin (including fear, confusion, worry about side effects, remembering to take it or the cost) with my healthcare professional.

### Why It Matters

Learning strategies to help address these barriers can help make taking medicine easier and keep you healthier.

**2 Action**  
Monitor your blood glucose according to the recommended schedule.

### Why It Matters

The best way to know how a new insulin is working is to do home blood glucose monitoring. Monitor more often when starting a new medicine. If blood glucose is usually in target range, it is doing its job,

**3 Action**  
Rotate the sites where injections are given.

### Why It Matters

If injections are always given in the exact same spot, fatty lumps could develop making it harder for the insulin to be absorbed.

- [▶ Fitting Injections Into Your Daily Routine](#)
- [▶ Long-Acting Insulin](#)
- [▶ Mealtime Insulin](#)
- [▶ Technology and Managing Diabetes](#)



# Mealtime Insulin

If you have type 1 diabetes, you need to take insulin. About 50% of people with type 2 diabetes will eventually also need to take insulin. Needing to take insulin doesn't mean your diabetes is getting worse; it just means your pancreas isn't making enough of this blood glucose-lowering hormone. There are several different types of insulins.

In this module, we're going to learn about rapid-acting and short-acting insulins. Rapid-acting insulin acts quickly (in 10 to 30 minutes). It peaks in about 1 to 2 hours after injection and lasts between 2 and 4 hours. Short-acting insulin usually reaches the bloodstream within 30 minutes after injection, peaks between 2 and 3 hours after injection and lasts for around 3 to 6 hours.

## Key Points

- Rapid-acting insulin works as quickly as 10 minutes. Short-acting insulin works as quickly as 30 minutes.
- You inject rapid-acting insulin up to 15 minutes before a meal, or short-acting insulin 30 minutes before a meal, which is why they're often called "mealtime insulins."
- Rapid-acting and short-acting insulin work by replacing what your body makes—or should make—naturally.

## What You Need to Know

- Rapid-acting insulin starts to drop your blood glucose level in as soon as 10 minutes, but if your blood glucose is high, you may want to wait longer before eating.
- Rapid-acting insulin is often called, "mealtime insulin" because you take it up to 15 minutes before meals, during, or slightly after a meal.
- Rapid-acting insulin helps manage blood glucose levels after you eat a meal or a snack.
- You may hear your healthcare professional refer to "peak time." This is when the insulin is working its hardest to lower your blood glucose.



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### Helpful Tip:

You may need to take a long-acting insulin along with the mealtime insulin your healthcare professional has prescribed. A long-acting insulin helps control your blood glucose levels between meals and during the night and is taken 1 to 2 times a day.

### Myths vs Facts

**Myth:** If you need to take insulin, it means you've done something wrong managing your diabetes.

**Fact:** Needing to take insulin doesn't mean you've done something wrong. It just means your body needs extra help in managing your blood glucose levels.

Nice work! You've finished reading through the information on this topic.

Next Topic



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will make sure to take my rapid-acting insulin up to 15 minutes before a meal or as directed by my healthcare professional.

#### Why It Matters

While rapid-acting insulin starts to work as soon as 10 minutes, if your blood glucose is high, you may want to wait a little longer to eat after injecting.

**2 Action**  
I will not blame myself for needing to take insulin as it doesn't mean I did anything wrong.

#### Why It Matters

Needing to take insulin simply means your body needs a little extra help managing your blood glucose levels for good health. It doesn't mean you failed or did anything wrong.

**3 Action**  
I will talk with my healthcare professional to see if a mealtime insulin is right for me.

#### Why It Matters

Your healthcare professional can best determine if a particular type of medicine is right for you.

# Technology and Managing Diabetes

There are all sorts of technologies that help make managing your diabetes easier than ever before. In this module, you'll learn about all the options that are available so you can determine which, if any, work best for you. As always, if you have any questions and want to know if a certain device will fit your needs, talk with your diabetes care team.

## Key Points

Diabetes technology and devices can provide many benefits to certain people. However, not everyone would benefit from using these tools. Sometimes they are covered by insurance and sometimes, they are not. Sometimes technology can make living with diabetes easier and improve overall diabetes management, but sometimes it will not. Learn what might be right for you and if it is worth the cost.

## What You Need to Know:

- **Continuous Glucose Monitoring (CGM)** uses a tiny sensor that is inserted under your skin on your stomach or arm to measure the glucose found in the fluid between your cells. Every few minutes, the sensor monitors your glucose and transmits the results to a monitor.
  - Some CGM devices send the information to another device, such as a reader, or to an app on your smartphone or other device. CGM devices can also be a part of an insulin pump.
  - CGM tracks your blood glucose levels all day and night, and lets you view them any time. You can track your blood glucose changes over a few hours or days to see trends that allow you to better balance your food, physical activity, and medicine.
- **Connected insulin pens, also known as smart insulin pens**, combine a reusable injector pen with a smartphone app to help you better manage your insulin delivery. In addition to calculating and tracking your insulin dose, the app provides reminders, alerts, and reports. There are a few pens to choose from. Talk to your healthcare professional about what would best meet your needs.
- **Insulin Pumps** are insulin-delivering devices that are roughly the size of a deck of cards. They can be worn on the skin or a belt or kept in a pocket. They connect to narrow, flexible plastic tubing that ends with a needle that is inserted just under the skin. You set the pump to give you a steady amount of insulin continuously throughout the day. Pumps release several units of insulin at a time at meals and at times when blood glucose is too high. This is based on the programming done by the user.
- **Artificial Pancreas Device System** uses a continuous glucose monitor (CGM), an insulin infusion pump, and a program stored on the pump or a smartphone. It is sometimes referred to as a "closed-loop" system or "automated insulin delivery" system.
  - There are several different types of Artificial Pancreas Device Systems. These systems mimic the way a healthy pancreas would regulate blood glucose levels.
  - An Artificial Pancreas Device System does more than just monitor your blood glucose levels, it also automatically adjusts how much insulin is delivered with little or no input from you. For more information, discuss with your healthcare professional as some of these systems are still being researched.



[▶ Fitting Injections Into Your Daily Routine](#)

[▶ Long-Acting Insulin](#)

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[▶ Technology and Managing Diabetes](#)

## Helpful Tip:

With so many options to choose from, make time to talk with your diabetes care team about which option(s) might be best for you.

## Myths vs Facts

**Myth:** If I start with insulin injections, I have to stay with insulin injections.

**Fact:** If you don't like injections, talk with your healthcare professional about switching to an insulin pump. It might make it easier for you to manage your diabetes.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will talk with my diabetes care team about the new technologies to help manage my diabetes.

### Why It Matters

Your diabetes care team can help you decide which of the new technologies might be better suited to your individual needs.

**2 Action**  
If I switch to a new technology, I will continue to monitor and record my blood glucose levels.

### Why It Matters

Monitoring your blood glucose levels helps you and your healthcare professional decide if your diabetes medicine, insulin, or any lifestyle changes need to be made.

**3 Action**  
If I switch to a continuous glucose monitor, I will still keep a traditional meter handy as a backup or if my readings seem off.

### Why It Matters

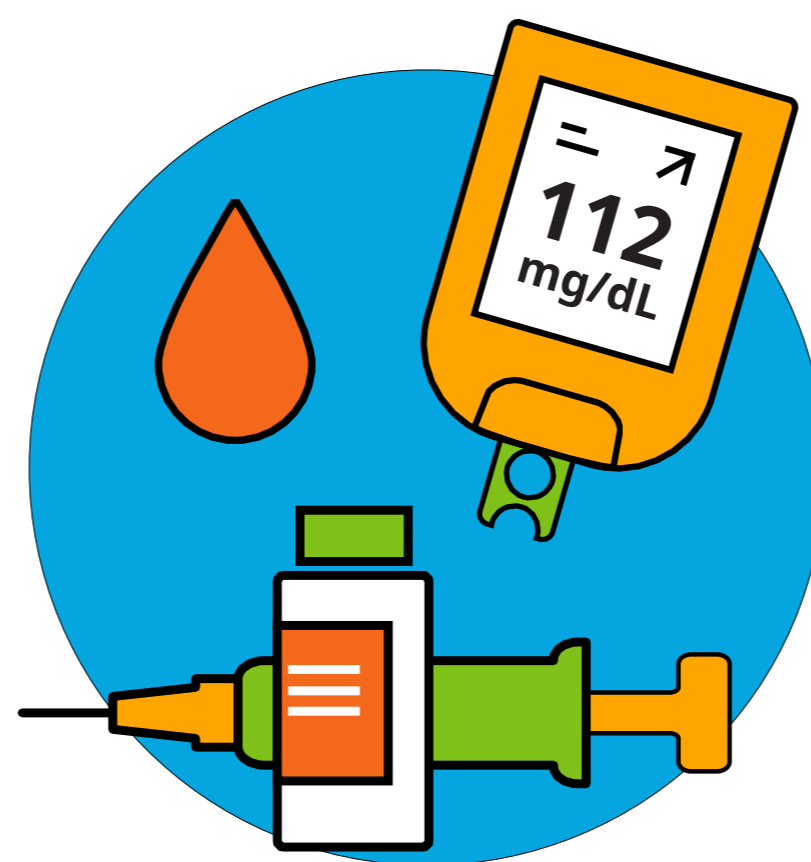
If how you feel doesn't match the blood glucose reading on your CGM, having a backup meter is always a good idea.

# Beyond the Basics of Type 1 Diabetes

The more you know about type 1 diabetes, the more it can be managed. As you have probably already learned, the more you know about your condition—any condition—the more empowered and in charge you feel. In this topic, you and your caregiver will learn some of the basics of type 1 diabetes and its management. As always, you're encouraged to reach out to your diabetes care team with any questions you may have.

## Key Points

- Living with type 1 diabetes presents different challenges at different stages in life. They all can be better managed by talking with your diabetes care team. These experts can provide you with all sorts of helpful tips for you, your child, or family member living with type 1 diabetes.
- No matter where you are—at home, work, or at school, it helps to be prepared. Having your tools on hand (monitors and medicine supplies) and snacks or glucose tablets ready for low blood glucose episodes is important.
- Remember: you are not alone. About 64,000 people (ages 0-64 years) are diagnosed with type 1 diabetes each year in the United States.



## What You Need to Know:

- During the period of 2001-2015, about 64,000 people ages 0-64 years in the United States were diagnosed with type 1 diabetes each year. It is very common in children and adolescents but may affect people of any age. It may make you feel more comfortable knowing that you are not alone.
- Managing diabetes will become a part of your daily routine if it hasn't already. You need to monitor your blood glucose and take your insulin every day. It is recommended that most people with type 1 diabetes use an insulin pump and a continuous glucose monitor (CGM) for the most advanced treatment methods.
- Healthy eating is as much a part of your diabetes care as taking medicine. It's important to understand that food affects you and your body a little differently than it affects people who don't have diabetes. Packing a lunch to take to school or work might be a helpful way to stay on track.
- Carrying around these supplies in a backpack or keeping extras in the office or at school may be helpful.
  - Snacks, glucose tablets, or fruit juice for low blood glucose
  - Back-up supplies for blood glucose monitoring or taking medicines (whether it is for the pump, CGM, meter or insulin injection supplies).
  - And don't forget to wear a medical ID necklace, bracelet, smart watch sleeve, or ankle bracelet
- Gatherings at another home, such as a dinner party or a sleepover can present particular challenges. If you're the caregiver, reach out to the host. If you are checking for your child, advise them on meal requirements, insulin injections, and what to do in case of a low blood glucose event. Reach out to your diabetes care team for suggestions.
- If you're the caregiver for a teenager or young adult, be sure to keep the lines of communication open. Find out about the pressures they may be facing. In time, you can help come up with solutions, but simply listening is a great first step.
- Dating with diabetes is another subject to discuss and prepare for with your young adult child. There's no one-size-fits-all solution, but here are some ideas that may help:
  - If their date knows that they're going to be dining with someone who has diabetes, it may be easier to stick with a healthy meal plan.
  - Talk with your diabetes care team about having a plan to deal with low blood glucose, monitoring blood glucose, or taking an injection while on a date.
  - Checking blood glucose before going out and having emergency snacks or glucose tablets on hand are also important.
  - If the person with diabetes is of drinking age, remind them that alcohol can quickly affect blood glucose. This can leave them at risk for low or high blood glucose. Many people with type 1 diabetes choose to avoid alcohol entirely for this reason.
- Finding healthy ways to manage stress is another important part of diabetes self-management. Discuss coping strategies with your son or daughter so that they feel prepared.
- If you're managing a career along with type 1 diabetes, you should feel comfortable asking your employer for special accommodations if you need them. Breaks to check blood glucose levels, eat a snack, take medicine, or rest until blood glucose levels become normal are reasonable according to the American Diabetes Association. The same is true for being able to keep your diabetes supplies and food nearby, having a private area in which to test your blood glucose, or take your insulin are also reasonable.

### Helpful Tip:

Communication is the key to handling most difficulties that we face. If you're the caregiver of someone with type 1 diabetes, be sure to listen to their concerns. You may not have all the answers, but knowing that they have you on their side to help find solutions may be enough of a comfort.

### Myths vs Facts

**Myth:** Growing up with type 1 diabetes means I'm going to miss out on having a normal childhood.

**Fact:** Not at all! Participating in the same activities as others might just take a little extra preparation and listening to your body. Talk with your healthcare professional about any questions you may have.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
This week, I will pack a healthy lunch for me or my child.

#### Why It Matters

Eating the right foods and the right portions of foods is as important as taking your medicine. It can help keep your blood glucose numbers in target.

**2 Action**  
I will keep my family up to date with how I am managing my blood glucose and suggest ways they can help.

#### Why It Matters

The more your family knows, the more they can help.

**3 Action**  
I will identify a place at work or school where I feel comfortable checking my blood glucose and taking my insulin.

#### Why It Matters

Finding a comfortable place to care for your diabetes will help you keep on track.

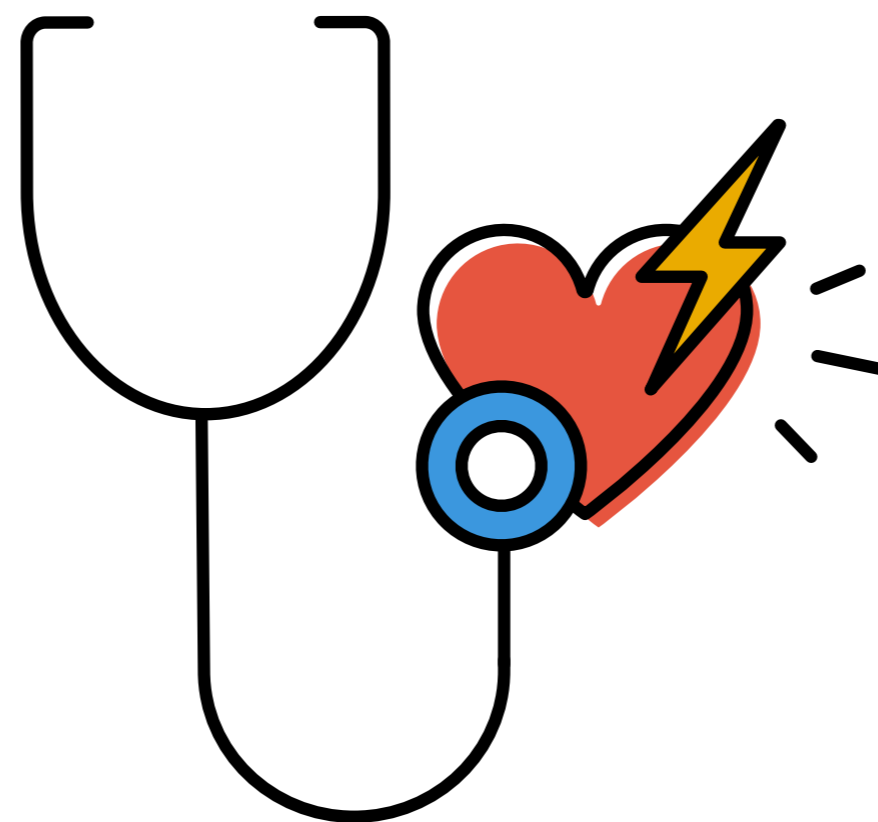
- ▶ Beyond the Basics of Type 1 Diabetes
- ▶ Cardiovascular Risk and Protection
- ▶ Changing Behavior
- ▶ Checking Blood Glucose and A1C
- ▶ Coping with Stress
- ▶ Highs and Lows
- ▶ Identifying Your Goals and Motivation
- ▶ Knowing Your Numbers

# Cardiovascular Risk and Protection

People with diabetes need to take extra care to manage their risk for heart disease compared to those who don't have diabetes. That's because people with diabetes are twice as likely to have a heart attack or stroke as those who don't have diabetes. In this module you'll learn ways to make protecting your heart a part of your everyday life.

## Key Points

- Diabetes puts you at an increased risk for a heart attack or stroke.
- Eating healthy, staying physically active, and managing your ABC's (A1C, blood pressure, and cholesterol) can reduce your risk of heart disease and stroke.
- Several diabetes medicines have been shown to be beneficial in reducing risks for heart disease.
- Regular checkups are a smart way to care for your heart. This typically includes having your A1C checked, a thorough eye exam, a foot exam, and making sure that your cholesterol levels and blood pressure are where they should be for you.



## What You Need to Know:

- Having diabetes puts you at increased risk for having a heart attack or stroke. That's because high blood glucose levels over time can damage your blood vessels and nerves. Plus, many people with diabetes also have high blood pressure, high cholesterol, and are overweight—3 things that increase your chances of getting heart disease.
- Your risk of heart disease and stroke is higher the longer you live with diabetes.
- There are many things you can do to decrease your risk of heart disease, including: eating less saturated fat and more high-fiber foods, such as fruits and vegetables, being physically active on a regular basis, and keeping your A1C in target range.
- Managing blood pressure is very important to reduce your risk of heart disease. For most, it means keeping blood pressure below 130/80 mmHg. For some who are at higher risk, the goals may be lower.
- Talk with your healthcare professional and schedule regular checkups. This can help you manage your blood glucose levels and also lower your risk of heart disease.
- Here are some other ways to care for your heart:
  - **Every 3 to 6 months** have your A1C and blood pressure checked by your healthcare professional.
  - **Once a year**, have the following blood tests: triglycerides and cholesterol (especially HDL and LDL) to check the health of your blood vessels and creatinine to check kidney function. In addition, have a thorough eye exam, which includes getting your eyes dilated so your doctor can see your optic nerve. You should also have a complete foot exam and get a flu shot and other recommended vaccines.

▶ [Beyond the Basics of Type 1 Diabetes](#)

▶ [Cardiovascular Risk and Protection](#)

▶ [Changing Behavior](#)

▶ [Checking Blood Glucose and A1C](#)

▶ [Coping with Stress](#)

▶ [Highs and Lows](#)

▶ [Identifying Your Goals and Motivation](#)

▶ [Knowing Your Numbers](#)

## Helpful Tip:

Managing your weight is very important. In fact, for people with overweight or obesity, losing about 5-7% of your body weight can help. If you need help learning how to eat healthy portions, check out the Diabetes Plate Method module for details.

## Myths vs Facts

**Myth:** If I have diabetes, there is nothing I can do to manage my risk for heart attack or stroke.

**Fact:** You can do many things to reduce your risk, including eating healthy foods, maintaining a healthy weight, exercising regularly, and taking your diabetes medicine(s) as prescribed.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will follow the recommendations for healthy eating and monitor my food portions to maintain a healthy weight.

### Why It Matters

Managing your weight can help you better manage your blood glucose levels and your heart health.

**2 Action**  
I will talk with my healthcare professional about having routine checkups to reduce my risk of heart disease.

### Why It Matters

Routine checkups can help alert your healthcare professional to changes in your blood glucose, cholesterol, weight, and other important factors that can impact your heart health.

**3 Action**  
I will be sure to schedule annual eye and foot exams.

### Why It Matters

Your eyes and feet can be affected by diabetes, which is why it is so important to have them checked by a healthcare professional at least once a year.

# Changing Behavior

Now that you're living with diabetes, chances are your diabetes care team has recommended that you change a few of your behaviors. You were probably told to become more active. Learning how to check your blood glucose, take medicines, or measure foods are other changes in behavior healthcare professionals often recommend.

Changing your behavior, even slightly, has the ability to change the course of your diabetes for the better. Even small changes can provide you with positive health benefits. Let's explore what some changes might be and how they may help.

## Key Points

- Changing or starting new behaviors isn't always easy, but with the right support—you can do it!
- Consider how these changes—even the small ones—may make a big difference in your health to help keep you motivated.
- Plan ahead and prepare for situations that can get in your way of changing your behavior by thinking of ways to overcome them.



## What You Need to Know:

- Changing behaviors may be a challenge. This is why it is often a good first step to think about some of the changes you need to make and how they can help.
- Breaking down the behavior you want to change into smaller steps will make it easier. Be as specific and realistic as possible. Instead of thinking about something broad and vague such as exercising more, break it down into each of the steps you might need to take to get to where you want to be, such as: I will get new sneakers or I will walk for 10 minutes today.
- Situations like holiday dinners or overnight trips might make it trickier to follow your meal plan. Making a plan that includes tips for handling things in advance is often helpful.
- Reach out to your family, friends, and diabetes care team for support. They can help motivate you and encourage healthy changes.
- Plan ahead and think about the things that trip you up and how you can either avoid or overcome them.

## Helpful Tip:

Focus on the benefits of changing unhealthy behaviors. When you see the benefits, you may see fewer obstacles. Don't try to change too many behaviors at once. That can be overwhelming and set you up for failure. You may even want your family members to join you as everyone can benefit from these healthy changes. Make a list of the behaviors you need and want to change, and try to tackle one each week.

## Myths vs Facts

**Myth:** Knowing that you need to make healthy changes should be enough to get you started.

**Fact:** Not true. It helps if you first understand how these changes can help improve your health. Seeing the big picture can be very motivating. Then, think of ways to make these changes doable.

## Nice work! You've finished reading through the information on this topic.

**Next Topic**

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will pick 1 health change that I can try today.

### Why It Matters

Starting slow may increase your chances of success.

**2 Action**  
I will identify 1 situation that gets in the way of my diabetes care.

### Why It Matters

Anticipating or avoiding obstacles that get in the way of keeping you on track can help you be better prepared for them.

**3 Action**  
I will tell the people on my diabetes care team what I need from them.

### Why It Matters

The more support you can get in managing your diabetes, the easier it may be to manage it.

[▶ Beyond the Basics of Type 1 Diabetes](#)

[▶ Cardiovascular Risk and Protection](#)

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# Checking Blood Glucose and A1C

An important part of caring for your diabetes is checking your blood sugar (or blood glucose). Glucose, which is the main sugar found in your blood, comes directly from the foods that you eat and is your body's energy source. It is also important to know the results of your A1C blood test. Your A1C test results can give you a picture of where your blood glucose levels—on average—have been over the past 2 to 3 months.

Keeping track of both your blood glucose and A1C is called, “monitoring.” Monitoring is key because it gives you the information you need to know where your blood glucose levels are and where they might be headed. It is a good indicator for how the diabetes treatment plan is working. It's like a GPS for your diabetes management. This information will help guide you and your diabetes care team to better customize your diabetes care plan.



## Key Points

- Monitoring your blood glucose—at home with a meter and at the office of your healthcare professional to check your A1C—is an important part of managing your diabetes.
- Blood glucose can also be monitored with a device called a continuous glucose monitor (CGM) that tracks blood glucose levels all day and night. It works with a tiny sensor put under the skin usually on your belly or arm.
- Your blood glucose levels provide important information to your diabetes care team that may require adjustments to your current care plan.
- Studies show that keeping your A1C below 7% may reduce your risk of some diabetes-related concerns, such as eye, kidney, or nerve problems.

## What You Need to Know:

- You may feel fine even when your blood glucose levels are above target. This is why monitoring your blood glucose is so important.
- There are 2 ways to monitor your blood glucose:
  - Having an A1C blood test at your healthcare professional's office
    - These results tell you an average of how your blood glucose levels have been during the past 2 to 3 months.
  - Checking your blood glucose at home using a meter or continuous glucose monitor (CGM) on a daily basis. A CGM tells you the amount of time your blood glucose is within the target range set by your diabetes care team. Since everyone is different, your healthcare professional may specify that you check before or after meals.
    - Be sure to keep track of your blood glucose results and share them with your healthcare professional at your visits. The patterns of highs and lows can help guide any changes in your medicine that need to be made.
    - Ask your healthcare professional to recommend a meter or CGM that is covered by your health plan. This may save you money on test strips and lancets.
- Your diabetes care team will use your blood glucose results to make any changes to your care plan, including your medicines, eating plan, and physical activities.
- For most people, when you wake up and before meals, your blood glucose levels should be between 80 mg/dL and 130 mg/dL. One to 2 hours after meals, your levels should be less than 180 mg/dL. Your recommended targets may be different.
- Keeping your A1C levels below 7% has been shown to help reduce your risk of some common diabetes-related problems (eye, nerve, or kidney problems). It can also impact your cardiovascular system, foot health, and even your dental health.

### Helpful Tip:

Ask your healthcare professional what your target blood glucose and A1C numbers should be. This may help you stay on track.

### Myths vs Facts

**Myth:** Having high blood glucose levels is bad.

**Fact:** Your blood glucose levels aren't good or bad. They simply provide information about how well your diabetes care plan is working. Most people will have blood glucose that falls above or below range some of the time. The goal is to increase the amount of time it falls within the goal range.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
At my next visit, I will ask my healthcare professional what my target blood glucose range should be.

**Why It Matters**  
Knowing your blood glucose targets may help you know if you need to make changes to your diabetes care plan.

**2 Action**  
I will ask my health insurance company what their “preferred” meter or CGM is.

**Why It Matters**  
Using a meter that is covered by your insurance may help you save money on testing supplies.

**3 Action**  
Every day this week, I will check and log my blood glucose levels as often as my healthcare professional recommends.

**Why It Matters**  
Checking your blood glucose levels lets you know how well your diabetes is being managed.

▶ **Beyond the Basics of Type 1 Diabetes**

▶ **Cardiovascular Risk and Protection**

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▶ **Checking Blood Glucose and A1C**

▶ **Coping with Stress**

▶ **Highs and Lows**

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▶ **Knowing Your Numbers**

# Coping with Stress

Most people have stress in their lives. The challenges that you and your family face living with diabetes can add to that stress. This stress can sometimes lead to depression, which is something that people with diabetes may be at higher risk for developing.

Additionally, coping with the unique stress that COVID-19 brings (such as isolation and added concerns about one's health) can add to these stress levels. Fortunately, there are things you can do to better handle how you cope. This topic will educate you about how stress affects your health and offer tips for managing it better.

## Key Points

- Stress can elevate your blood glucose levels. Sometimes, it can lower it and result in low blood glucose—if you're too stressed to eat than skip a meal.
- Find ways to cope with stress, whether it be leaning on your network of supportive family and friends, going for a walk, doing yoga, or reading a relaxing book.
- It's worth noting some of the common symptoms of depression, which include loss of interest or pleasure in doing things you typically enjoy, trouble sleeping or sleeping more than usual, and eating more or less than usual. If you have any of these symptoms or notice them in a friend or family member, talk with your healthcare professional. There are numerous things one can do to help cope with depression and you are not alone.

## What You Need to Know:

- Stress may directly affect your blood glucose levels. It can either raise or lower blood glucose levels. Here's why:
  - When you're in a stressful situation—maybe an argument with a friend—stress hormones, such as adrenaline, are released. This causes blood glucose levels to rise.
- Feeling isolated or “different” because of your diabetes can be stressful, too. Sometimes, this type of stress may make you want to skip a meal, but don't. A skipped meal could lead to low blood glucose.
- The day-to-day management of diabetes can add to your stress. Remembering to take your medicine(s), checking your blood glucose levels, eating healthy, and being active can add up. Predicting obstacles and planning ahead can help you feel like you are better able to manage things.
- Find healthy ways to cope with stress, such as deep breathing, meditation, or even taking a long walk with a friend.
- Check blood glucose more often when you are feeling stressed and see how it affects you.



## Helpful Tip:

Getting support from your friends, family, an online support group, or your diabetes care team can help you cope with stress. There may be times when it is helpful to talk with a mental health professional, especially if you're experiencing signs of depression. Ask your healthcare professional for a referral if you need one and remember that you are not alone. Your mental health is as important as your physical health.

## Myths vs Facts

**Myth:** If I were stronger, I would be able to handle stress better.

**Fact:** The only kind of strength that helps with the management of stress is a strong support system. Don't forget to reach out to family, friends, or your diabetes care group for help in managing stress.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will identify what life stresses make it harder for me to manage my diabetes.

### Why It Matters

Being aware of how life gets in the way may help you prepare for it and possibly even change it.

**2 Action**  
For the next week, I will focus on how to make the hardest part of managing diabetes easier.

### Why It Matters

You can reduce stress by talking with your diabetes care team or others in your support system. They may be able to help you find ways to change the way you look at stressful situations or change the environment that's causing stress.

**3 Action**  
This week, I will try 1 strategy to help manage stress—taking a walk, spending time with friends, watching a movie.

### Why It Matters

Stress is a fact of life. Having tools to help manage stress may help.

▶ **Beyond the Basics of Type 1 Diabetes**

▶ **Cardiovascular Risk and Protection**

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# Highs and Lows

Understanding what causes high and low blood glucose is an important part of taking care of type 1 diabetes. In this topic, we'll learn the causes of high and low blood glucose, how to recognize and treat its symptoms, and how to look for patterns. It's important to keep your numbers within the range your care team has set for you.

## Key Points

- Knowing your target range for your blood glucose is important, so be sure to ask your healthcare professional.
- Keep track of your blood glucose levels and see if there are patterns. Were you more active when your blood glucose levels changed? Were you sick or stressed? All these things can impact your blood glucose levels. Share your tracker with your healthcare professional at your next visit.
- Having snacks available if your blood glucose drops is an important part of self-care. Be sure to let your family, friends, and co-workers know the symptoms of low blood glucose and where the snacks to help treat this are located.



## What You Need to Know:

- Your blood glucose numbers provide important information about how well your diabetes treatment plan is working. Your diabetes care team will use this information to determine if your care plan is working or if it needs to be changed.
- Everyone's blood glucose goals are different and are determined by your healthcare professional. However, for most non-pregnant people with type 1 diabetes, the blood glucose targets are:
  - 80 mg/dL to 130 mg/dL when you wake up and before eating or drinking. This is often called fasting plasma glucose or FPG.
  - Less than 180 mg/dL is the typical target 1 to 2 hours after eating or drinking. This is often called postprandial glucose or PPG.
- Low blood glucose is below 70 mg/dL at any time.
- Common symptoms of **low** blood glucose are feeling shaky, dizzy, sweaty, hungry, angry or irritable, having a headache or difficulty concentrating, and being confused.
  - Tips for managing low blood glucose:
    - Have a snack that includes 15 grams of carbs, such as ½ cup of regular fruit juice or regular soda, 4 glucose tablets, and candies that can be quickly chewed, such as 7 gummies.
    - Keep these snacks handy in your car, office desk, and nightstand. Let your family, friends, and co-workers know how to recognize the signs and symptoms of low blood glucose and what to give you if you are low.
    - Fifteen minutes after having a snack, check your blood glucose again. If your blood glucose is still low, have another small snack. Once your blood glucose returns to target range, have a meal to help keep your blood glucose from becoming low again.
- Common symptoms of **high** blood glucose are increased thirst, increased urination, dry mouth or dry skin, tiredness or fatigue, blurred vision, more frequent infections, such as yeast or urinary tract infections, slow-healing cuts and sores, or unexpected weight loss.
  - Tips for managing high blood glucose:
    - If you have signs of high blood glucose, be sure to check more often and take your insulin as recommended. The non-insulin medications that you take can also have an impact on your blood glucose. As always, ask your diabetes care team if you have any questions.
    - Be sure to check your blood glucose before, after, and while playing sports or other activities as adrenaline may cause your sugar levels to rise.
- Keep track of your blood glucose levels and try to determine the cause of your highs and lows. Use one of the many apps to keep track of your numbers or [keep a written record](#). Bring this information to your next office visit to discuss with your healthcare professional.

- ▶ Beyond the Basics of Type 1 Diabetes
- ▶ Cardiovascular Risk and Protection
- ▶ Changing Behavior
- ▶ Checking Blood Glucose and A1C
- ▶ Coping with Stress
- ▶ **Highs and Lows**
- ▶ Identifying Your Goals and Motivation
- ▶ Knowing Your Numbers

## Helpful Tip:

If you or your loved one is experiencing any of the symptoms described above, check your blood glucose. It may mean that it's too high or too low. Then, follow the suggestions for managing your blood glucose.

## Myths vs Facts

- Myth:** There's nothing I can do about high or low blood glucose.
- Fact:** There are many things you can do to remedy blood glucose levels that are out of your target range. Follow the tips we described above and talk with your diabetes care team for additional tips.

Links to: <https://diabeteseducation.novocare.com/content/dam/diabetes-patient/novocare-diabeteseducation/pdfs/booklet-blood-glucose-tracker.pdf>

## Nice work! You've finished reading through the information on this topic.

**Next Topic**

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will work with my diabetes care team to identify my blood glucose goals.

**Why It Matters**  
Blood glucose goals vary from person to person. Knowing what yours are is important, so be sure to have this conversation with your diabetes care team.
- 2 Action**  
I will keep track of my blood glucose levels so that I can look for patterns and share them with my diabetes care team.

**Why It Matters**  
Recording your blood glucose numbers may help you become more aware of patterns. Try to determine what causes your highs and lows and discuss this with your diabetes care team.
- 3 Action**  
I will call my healthcare professional to let them know if my blood glucose goes below 70 mg/dL.

**Why It Matters**  
Even 1 low reading may require a change in your medicine. This is why it's important to discuss this with your healthcare professional.

# Identifying Your Goals and Motivation

Your diabetes is different from anyone else's diabetes. You have your own reasons for staying motivated and following your diabetes care plan. You also have your own goals. Once you're clear about what your goals and motivations are, it's easier to identify the action steps to achieve those goals, take charge and better manage living with diabetes. Be sure to ask your family and friends for their support. This can make things much easier for you.

## Key Points

- Know your goals. These are the big-picture reasons why striving for better health is important to you.
- Identify specific action steps you can take that will help you reach your goals. Be as specific and realistic as possible.
- Understanding what motivates you can actually help you stay motivated. Jot down some of your motivations for following your diabetes care plan. You may want to put this list somewhere visible to help keep you on track.
- Think about the obstacles you face and make a plan for handling each one. Feeling prepared can be very empowering.



## What You Need to Know:

Here are some tips for getting and keeping you motivated:

- Everyone is motivated by different things. Here are a few goals that might also work for you:
  - I want to be healthy so that I can be there for my family.
  - I know someone who had problems as a result of not taking care of their diabetes. I don't want that to happen to me.
  - I want to feel better and have more energy.
- Think about writing down your main motivations and putting them someplace where you'll see them every day.

Here are a few tips for setting your diabetes care action steps:

- Start by talking with your healthcare professional and partner with them to set specific and realistic things you can do.
- Make your action steps specific. For example, "I will check my blood glucose first thing every morning."
- Set action steps that are realistic. If you find it difficult to be active once a week, it may be unrealistic to think you can be active every day. Start with small steps and add to them little by little. Be sure to take the time to celebrate your accomplishments. This can help you stay motivated.

### Helpful Tip:

Write down your goals *and* your motivations. Use a magnet to place them on your refrigerator. This can help ensure that you see it every day—a few times each day!

### Myths vs Facts

**Myth:** I have a reason to feel motivated today and will use it to stay motivated in the future, too.

**Fact:** Just as your diabetes treatment goals may change with time, the same is true for your reasons to stay motivated. Review and update your goals from time to time.

**Nice work! You've finished reading through the information on this topic.**

**Next Topic**



Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will write down my number 1 goal or motivation for making healthy changes.

#### Why It Matters

You may be more likely to succeed if you figure out what motivates you. Remind yourself of this motivation when things get tough.

**2 Action**  
For the next week, I will set a realistic action step I can manage to add to my exercise routine.

#### Why It Matters

Physical activity and exercise help your body become more sensitive to your own insulin and use it more effectively. Before starting any exercise plan, be sure to talk with your healthcare professional first.

**3 Action**  
I will reward myself for sticking to my action steps and achieving them this week.

#### Why It Matters

Learning how to stick to your action steps will teach you what may help you maintain healthy changes long term and reach your goals.

▶ **Beyond the Basics of Type 1 Diabetes**

▶ **Cardiovascular Risk and Protection**

▶ **Changing Behavior**

▶ **Checking Blood Glucose and A1C**

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▶ **Identifying Your Goals and Motivation**

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# Knowing Numbers

As you may already know, people with type 1 diabetes need to know their numbers to better understand how well their condition is being managed. It also helps to understand the many terms your diabetes care team will be using when they discuss your diabetes treatment plan with you. This learning module will help you do just that. The more you know, the better you can partner with your diabetes care team to keep your numbers in their target range.

## Key Points

- There are various blood tests your healthcare professional will want to do in order to learn how well your blood glucose is being managed, what your blood glucose levels are when you wake up, and how it differs 1 to 2 hours after you eat or drink.
- Checking to see how well your kidneys are functioning and determining the health of your eyes are also important.
- Your healthcare professional will determine how often these tests are needed for you or your child.

## What You Need to Know:

- **A1C** measures how well your blood glucose levels have been controlled over the past 2 to 3 months. It is measured by a blood test that is done 2 to 4 times a year. For most people, keeping your A1C less than 7% is the goal. Your healthcare professional will tell you what is best for you or your loved one.
- **Fasting Plasma Glucose (FPG)** is the measurement of your blood glucose levels when fasting for at least 8 hours, like when you first wake up in the morning. For most people, the FPG goal is between 80 mg/dL and 130 mg/dL. Your healthcare professional may set different goals for you.
- **Postprandial Glucose (PPG)** is the measurement of your blood glucose levels 1 to 2 hours after you eat or drink. It is often measured several times a day but may vary as your healthcare professional recommends. For most people, the PPG goal is less than 180 mg/dL.
- **Time in Range (TIR)** is the percent of time blood glucose falls within a range (usually between 70 and 180 mg/dL). For most people, the goal is to have their TIR be at least 70%.
- **Ketone test** measures the presence of ketones found in the urine or blood. Ketones are acids that can build up when the body doesn't have enough insulin to move blood glucose into your cells. Whenever your blood glucose goes above 250 mg/dL twice in a row, your doctor may recommend your ketone levels be checked. The goal is to have a negative result.
- **Blood Pressure** measures the pressure against the walls of your blood vessels. It should be measured at every medical visit or at least 2 to 4 times a year. An elevated blood pressure (above 130/80 mmHG) can indicate a higher risk for heart and blood vessel problems.
- **Cholesterol:** An annual check of your LDL cholesterol gives a better picture of the health of your blood vessels. Keeping cholesterol in the target range reduces the risk for heart and blood vessel problems.
- **Estimated glomerular filtration rate (eGFR)** informs your healthcare professional of how well your kidneys are working. This test is often done once a year, but may be more frequent depending on what your healthcare professional decides is best for you. The goal is 60 mL/min or higher.
- Your healthcare professional may also want to see in the back of your eye, which requires them to put drops in your eyes to dilate or open them up even more. This is often done once a year and lets your healthcare professional know if there are any signs of eye problems.



▶ Beyond the Basics of Type 1 Diabetes

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▶ Knowing Numbers

## Helpful Tip:

Keep track of all your numbers. Write them down and look to see if you notice any patterns. Be sure to let your healthcare professional know if your blood glucose levels become too high or low, and if ketones are present.

## Myths vs Facts

**Myth:** Everyone with type 1 diabetes gets tested on the same schedule.

**Fact:** Not true. The frequency of your tests may be different than someone else. Your healthcare professional will determine what is best for you.

**Nice work! You've finished reading through the information on this topic.**

Next Topic

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will record the results of my A1C tests and make sure I know what they mean.

### Why It Matters

Keeping track of how well your blood glucose levels are being managed over the last 2 or 3 months gives you and your diabetes care team important information to decide if your treatment plan needs to change.

**2 Action**  
I will check my blood glucose 2 hours after eating.

### Why It Matters

An after-meal reading over 180 mg/dL means you may need to alter your diabetes care plan.

**3 Action**  
I will ask my healthcare professional about any test results I'm not familiar with so that I can get a better understanding of how my overall diabetes management plan is going.

### Why It Matters

Diabetes is not just about sugar. It's important to pay attention to the numbers that indicate how your blood vessels (especially in the heart and kidneys) are working as well. Being prepared may catch ketones before they can do any damage.



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MOVING



MANAGING



STAYING  
ON TRACK

# My Diabetes Learning Path

This program helps you personalize your learning needs at your own pace. It allows you to choose the information you need—from useful tips on healthy eating, being active, taking medicine, and staying on track—to support the diabetes management goals that you work with your healthcare professional to set.

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MANAGING



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# All Modules List



## Eating modules



**Basic Carbohydrate  
Counting**



**Reading a Nutrition  
Facts Label**



## Moving modules



**Managing Blood Glucose  
Around Physical Activity**



## Managing modules



**Fitting Injections Into  
Your Daily Routine**



**Mealtime Insulin**



**Long-Acting Insulin**



**Technology and  
Managing Diabetes**



## Staying on track modules



**Beyond the Basics of  
Type 1 Diabetes**



**Coping with Stress**



**Cardiovascular Risk  
and Protection**



**Highs and Lows**



**Changing Behavior**



**Identifying Your Goals  
and Motivation**



**Checking Blood Glucose  
and A1C**



**Knowing Your Numbers**



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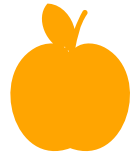
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# Eating Modules



**Basic Carbohydrate  
Counting**



**Reading a Nutrition  
Facts Label**



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# Moving Modules



**Managing Blood Glucose  
Around Physical Activity**



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ON TRACK



# Managing Modules



**Fitting Injections Into  
Your Daily Routine**



**Mealtime Insulin**



**Long-Acting Insulin**



**Technology and  
Managing Diabetes**



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# Staying on Track Modules

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Type 1 Diabetes**

▶ **Coping with Stress**

▶ **Cardiovascular Risk  
and Protection**

▶ **Highs and Lows**

▶ **Changing Behavior**

▶ **Identifying Your Goals  
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▶ **Checking Blood Glucose  
and A1C**

▶ **Knowing Your Numbers**

▶ **Basic Carbohydrate Counting**

▶ **Reading a Nutrition Facts Label**

# Basic Carbohydrate Counting

Healthy eating is as much a part of managing your diabetes as taking your medicine. What you eat, when you eat, and how much you eat all play a role in managing your blood glucose (sugar) levels. For example, your body needs carbohydrates for energy, much like a car needs gas to run. Once eaten, carbs turn into sugar which can raise your blood glucose. Carbohydrate counting is important to managing your type 1 diabetes because of the big impact carbs can have on your blood glucose levels.

## Key Points

- Carbohydrates are found in plant foods (fruit, vegetables, grains, starches, beans, and sugar). Milk and yogurt, while not plant foods, also contain carbs.
- Carbohydrates come in 3 forms: starches, sugars, and fiber. All starches break down into sugars.
- Counting carbs, or keeping them in balance, is an important step for managing blood glucose. But counting carbs doesn't mean you can't eat the foods that you enjoy. It's all about meal planning.
- The Nutrition Facts label lists total grams of carbs per serving.
- The amount of carbs you need is dependent on factors including your weight, level of exercise, and the medicine that you take.

## What You Need to Know:

- Carbohydrate foods have the most impact or effect on blood glucose. Foods containing mostly protein and/or fat do not increase blood glucose as much as carbs.
- There are 3 main sources of carbs in foods:
  1. Starches, which are found in bread, pasta, rice, cereal, corn, crackers, and some vegetables.
  2. Sugars, which are found in fruit, fruit juices, milk, yogurt, and candies.
  3. Fiber, which is found in fruit, vegetables, whole grains, beans, peas, and nuts.
- Foods that do NOT contain carbs are just as important for you to know. Here are some examples:
  - Proteins, which include meat, poultry, fish, eggs, cheese, and tofu.
  - Fats, which include oil, margarine, butter, mayonnaise, avocado, nuts, and seeds.
  - Foods that are free of carbs include sugar-free gelatin and sugar-free gum.
- Non-starchy vegetables usually have less of an impact on blood glucose. Some of these include carrots, tomatoes, lettuce, green beans, and broccoli.
- Carbohydrates are measured in grams. One serving size (also known as 1 carb choice) contains 15 grams of carbohydrate. Here are some examples of 1 carb choice:
  - 8 ounces of skim milk
  - 1 small apple
  - 1 slice of bread
  - 1/3 cup of light ice cream
- The amount of insulin you take will be based on the amount of carbs you plan to eat. Learning to count them is important to keeping your blood glucose balanced.
- Your diabetes care team can advise you about how many carbs you need each day. This will depend on several different factors including your weight, level of activity, and the medicines that you're taking.

## Helpful Tip:

Look at the Nutrition Facts label on your favorite foods at home. The label lists the total grams of carbs for each serving. Make sure to look at the total grams of carbs and not just the amount of sugar in an item. This is a good way to become more familiar with carb counting.

## Myths vs Facts

**Myth:** If you have diabetes you should avoid all forms of sugar.

**Fact:** Sugary foods tend to be high in carbs (calories and fat, too), so the portion size is often very small. If you plan ahead and save them for a special treat, you should be fine.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will find 3 foods at home that are sources of carbohydrates.

**Why It Matters**  
The first step in counting carbs is learning which foods contain them.
- 2 Action**  
I will use measuring cups for 1 meal this week to measure out my carb food portions.

**Why It Matters**  
Once you know which foods contain carbs, the next step is knowing how many carbs they contain.
- 3 Action**  
I will talk with a dietitian or my healthcare professional about how to balance my meal plan with my insulin.

**Why It Matters**  
Each person should have their own unique food plan designed specifically for them. Take time to learn about how different foods affect your blood glucose and how much insulin you need to keep your blood glucose in target range.

Next Topic 

# Reading a Nutrition Facts Label

Knowing how to read and understand a nutrition facts label is important—even if you don't have diabetes. These labels can help you keep track of carbs, fat, and sodium. They also give you information about the percent of your daily value of these things. Reading food labels can help you make healthy choices and better manage your diabetes.

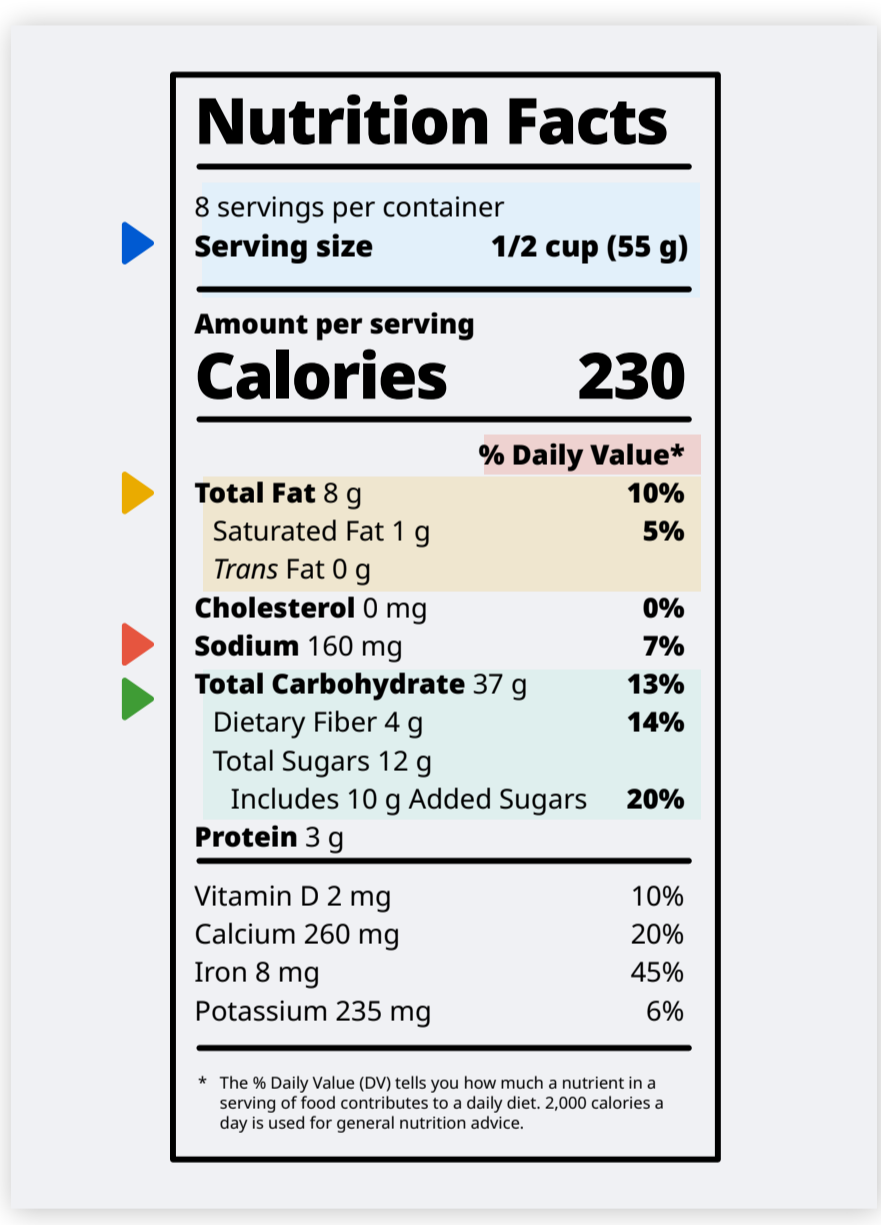
## Key Points

- The serving size is the first thing to review on a food label. It is based on the typical portion of food that is usually eaten. All of the nutrition information on the label (such as calories and grams of carbs) is based on the serving size that is listed. Talk with your healthcare professional to best determine what is right for you.
- The amount of food you eat may be different from the serving size listed. Adjust the numbers on the food label in your calculations based on what you actually eat.
- For most people, looking at the “total carbohydrate” figure is the next most important number to review. Your food plan may be based on a certain amount of carbohydrates at each meal.
- Pay attention to how much fat your food choice contains. Keep saturated fats to no more than a single gram and trans fats to 0 grams per serving.
- Choose foods with at least 3 grams of fiber per serving. These choices can help you feel fuller and eat less.

## What You Need to Know:

There are 5 key areas when reading a nutrition facts label.

- ▶ **Serving size:** Remember that most packages contain more than 1 serving, so be mindful of how much you're choosing to eat and adjust your calculations accordingly.
- ▶ **Saturated fat:** This is the unhealthy type of fat, which may raise your bad cholesterol or what is referred to as LDL-cholesterol (low-density lipoprotein). This is different than HDL-cholesterol (high-density lipoprotein), which is considered good. Try to choose foods that contain no more than 1 gram of saturated fat per serving.
- ▶ **Trans fat:** This is another kind of unhealthy fat, which can also raise your bad cholesterol. For this reason, look for foods that contain “0 grams” of trans fat.
- ▶ **Sodium:** Just because a food doesn't taste salty doesn't mean it's low in sodium. Low-sodium foods have no more than 140 mg of sodium per serving. High-sodium foods include canned foods, luncheon meats, and processed foods.
- ▶ **Total carbohydrates:** This figure combines 2 kinds of carbs—dietary fiber and sugars. Carbs raise blood glucose more than protein or fat. It's important to look at the total amount of carbs in a serving and not just the amount of sugar. Soluble fiber has little effect on blood glucose but can help keep your digestive tract working smoothly. It can also help you feel fuller. Choose foods with at least 3 grams of fiber per serving. It's important to know that carbs raise blood glucose even more than protein or fat.



## Helpful Tip:

Pay close attention to the serving size listed on the label. It may be a lot smaller than the portion sizes you've been eating. Use measuring cups and spoons as well as food scales to check your servings from time to time.

## Myths vs Facts

- Myth:** The only benefit of eating foods that are high in fiber is for your digestion.
- Fact:** Fiber helps you feel fuller, which may help you eat less. It also has benefits to helping keep blood glucose and blood fats closer to the target range.

## Nice work! You've finished reading through the information on this topic.


Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will look at the food labels on at least 3 items in my cabinets or pantry and note the 5 important areas.

**Why It Matters**  
Checking labels may help you learn what to look for to make healthy decisions about what and how much to eat.
- 2 Action**  
Next time I'm at the grocery, I will compare labels on 2 similar food items. After noting the differences, I can then decide which is the better choice.

**Why It Matters**  
Comparing labels on similar products may help you learn to select healthier options.
- 3 Action**  
I will practice my measuring skills for one day this week, weighing and measuring out all my food portions.

**Why It Matters**  
Being aware of your portions will help you better manage how much you eat and have more accurate calculations of calories and of carbohydrates—which may affect blood glucose.

Next Topic 

▶ **Managing Blood Glucose Around Physical Activity**

# Managing Blood Glucose Around Physical Activity

Being active—whether you’re playing sports, walking your dog, or simply taking a walk with a friend—can often lower your blood glucose. Sometimes, being active can cause your blood glucose to drop too low. In this module, we’ll learn how people with type 1 diabetes can enjoy being active while keeping their blood glucose at a safe level.

## Key Points

- Talk with your healthcare professional before starting any exercise program. They will be able to tell you how often to check your blood glucose so that you remain safe while adding activities to your life.
- Always keep snacks on hand in case your blood glucose drops too low.
- Check your blood glucose before and after being active.
- A good rule of thumb is to eat 15 grams of carbs for every 30 minutes of activity. Children may only require 5-15 grams of carbs, depending on their age and size. Be sure to discuss this with your child’s healthcare professional.

## What You Need to Know:

- Being active can cause your blood glucose level to drop. This can happen right after you exercise or play sports and even as long as 48 hours later. It is recommended that you exercise about 150 minutes each week. This can even be broken down to as little as 10 minutes twice a day, which may be more manageable for you.
- Always carry quick-acting carbs with you—juice, non-diet soda, sweets, or glucose tablets—so that you’re prepared for a low blood glucose event. Be sure to replace them after you’ve eaten them. Make sure that your support teams (friends, co-workers, and other helpers, such as a school nurse or sports coach) have extra snacks on hand if needed.
- The American Diabetes Association recommends that people with type 1 diabetes check their blood glucose before and after being active. Keeping your insulin dose balanced is important and can even be impacted by doing chores around the house.
- If you notice a big change in blood glucose after an activity, let your healthcare professional know so that you can make a plan for the future.
- For every 30 minutes of activity you do, eat a snack that contains 15 grams of carbohydrates. It is also suggested to have a snack if your blood glucose is below 100 mg/dL before activities or less than 90 mg/dL after activities.
  - Some snacks that contain 15 grams of carbs include:
    - 1 small piece of fruit
    - 4 ounces of fruit juice
    - 6 saltines
    - 1 mini box of raisins
    - 4 glucose tablets
- Sometimes being active can cause blood glucose to rise. This can happen for several reasons, including:
  - Your blood glucose may be too high before starting your activity
  - You may have eaten too much food before being active
  - Your diabetes medicine may need some adjusting
  - Too much adrenaline was released by being active or due to stress

### Helpful Tip:

Talk with your healthcare professional before starting any new activities. They will be able to advise you about when to check your blood glucose and when to eat in order to keep your blood glucose levels within a healthy range. It may also be suggested that you decrease your insulin dose on days you are more active.

### Myths vs Facts

**Myth:** All physical activities cause your blood glucose to drop.

**Fact:** Some do, but others may not. Check with your healthcare professional to ensure the right balance between physical activity and your insulin dose.

## Nice work! You’ve finished reading through the information on this topic.

Now you’re ready to act and start incorporating these new healthy habits into your life. This will help you practice what you’ve learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
Before participating in any sports or physical activities, I will have a plan for when and how often to check my or my child’s blood glucose.

#### Why It Matters

The only way to help know how being active is affecting your diabetes or your child’s diabetes is to check blood glucose before and after being active.

**2 Action**  
I will choose a 15-gram carb to treat low blood glucose.

#### Why It Matters

Thinking about treating low blood glucose ahead of time gets you one step closer to having treatment on hand when needed.

**3 Action**  
I will be sure to wear medical identification.

#### Why It Matters

Medical identification (such as an ID bracelet) allows people to know that you—or your child—have type 1 diabetes and the kinds of medicines that are being taken. This is especially important if you or your child become disoriented or pass out while being active so that proper treatment is offered quickly.

### Next Topic

- Fitting Injections Into Your Daily Routine
- Mealttime Insulin
- Long-Acting Insulin
- Technology and Managing Diabetes

# Fitting Injections into Your Daily Routine

Being prescribed an injectable medicine, such as insulin, may make some people uncomfortable, scared, and even wonder if they've done something wrong. Needing an injectable medicine is not your fault. It's just another way for your healthcare professional to help keep your blood glucose in target range.

## Key Points

- Your diabetes care team can give you tips for making injections easier, so don't be shy about reaching out.
- Letting your friends and family know that you need to take an injectable medicine to help manage your diabetes may help you feel less concerned about taking your medicine during social situations.

## What You Need to Know:

- There are things you can do to make giving yourself injections easier, such as:
  - Practicing on an "injection pillow"—a soft pad that's used just for this purpose. It's worth noting that the needles used with diabetes medications are small in comparison to traditional hypodermic needles.
  - Trying different injectable diabetes medicines, such as a vial and syringe, a pump, or a pen
  - Ask your diabetes care team about ways to make injections easier. For example, there are prefilled disposable pens that you may prefer.
- Talk with your friends and family about your need to take an injectable medicine to help manage your diabetes. This may help lessen your concerns about having to take your injectable medicine in a social situation, like during a family gathering.

### Helpful Tip:

Focus on the positive. Ask your healthcare professional or pharmacist about how your injectable medicine is going to help keep your blood glucose in target range.

### Myths vs Facts

- Myth:** Injections are always painful.
- Fact:** There are ways and options to make injections easier, which is why it's important to talk with your diabetes care team. They can give you some helpful tips.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will practice injecting into an injection pillow.  
**Why It Matters**  
Practicing with an injection pillow can help you learn how to give yourself an injection safely.
- 2 Action**  
I will ask my diabetes care team for tips about making injections more routine.  
**Why It Matters**  
Reaching out to experts always makes sense. They have lots of experience and have learned all sorts of tips they'd be happy to share to make taking your medicine easier.
- 3 Action**  
For the next week, I will focus on how taking my injectable medicine is helping me stay healthy.  
**Why It Matters**  
Thinking positively may help you stay on track. It may also help you look at your medicine as an important partner in caring for your health.

Next Topic 

▶ **Fitting Injections Into Your Daily Routine**

▶ **Mealtime Insulin**

▶ **Long-Acting Insulin**

▶ **Technology and Managing Diabetes**

# Long-Acting Insulin

Long-acting insulin, also called background insulin, works to keep blood glucose in target range between meals and during the night. It reaches the bloodstream several hours after injection and tends to lower glucose levels for up to 24 hours.

There are several different kinds of long-acting insulins. It is important to know the specific kind you take and the facts about how it works. This module will help you learn about this important type of insulin.

## Key Points

There are two main types of insulin. One type acts slowly and is called “background” insulin or basal insulin because it works in the background throughout the day and night. The other kind of insulin is called mealtime insulin and is taken before eating.

## What You Need to Know:

- Background insulin is taken once or twice a day at the same time each day. It helps manage blood glucose levels between meals and during the night. It does not need to be taken with food.
- Some background insulin is “long-acting”—meaning it has a duration of action of up to 24 hours and it does not have a peak action time—or a time when it works the hardest. Another kind is called “intermediate-acting” and while it can work for up to 24 hours, it has a peak action time between 4 and 12 hours.
- Often, background insulin is taken with another diabetes medicine—either diabetes pills or a mealtime insulin.
- Premixed insulins are a combination of mealtime and background insulin.
- The recommended dose is different for each person. It is based on several factors including your weight and the level of sugar in your blood.

## Helpful Tip:

- It’s common for your healthcare professional to adjust the dose of your insulin to meet your body’s unique demands. This doesn’t mean there is something wrong. It may just take some time to finely tune your dose to meet your personal needs.
- If using an intermediate-acting insulin (like NPH), a snack may be needed between the lunch and dinner meal to reduce the risk of low blood glucose.
- Long-acting insulin can come in prefilled insulin pens or it can be given using a syringe with a vial of insulin.
- Store opened or used pens or vials of insulin at room temperature, and unopened pens or vials in the refrigerator.
- Don’t use insulin that is past its expiration date.

## Myths vs Facts

**Myth:** There is no risk for hypoglycemia (low blood glucose) with long-acting or background insulin.

**Fact:** Long-acting insulin can still lead to hypoglycemia, and the risk increases if taken with mealtime insulins or with certain diabetes pills (like sulfonylureas).

## Nice work! You’ve finished reading through the information on this topic.

Now you’re ready to act and start incorporating these new healthy habits into your life. This will help you practice what you’ve learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
Discuss any problems you may have taking insulin (including fear, confusion, worry about side effects, remembering to take it or the cost) with my healthcare professional.

### Why It Matters

Learning strategies to help address these barriers can help make taking medicine easier and keep you healthier.

**2 Action**  
Monitor your blood glucose according to the recommended schedule.

### Why It Matters





The best way to know how a new insulin is working is to do home blood glucose monitoring. Monitor more often when starting a new medicine. If blood glucose is usually in target range, it is doing its job,

**3 Action**  
Rotate the sites where injections are given.

### Why It Matters

If injections are always given in the exact same spot, fatty lumps could develop making it harder for the insulin to be absorbed.

**Next Topic**

# Mealtime Insulin

If you have type 1 diabetes, you need to take insulin. About 50% of people with type 2 diabetes will eventually also need to take insulin. Needing to take insulin doesn't mean your diabetes is getting worse; it just means your pancreas isn't making enough of this blood glucose-lowering hormone. There are several different types of insulins.

In this module, we're going to learn about rapid-acting and short-acting insulins. Rapid-acting insulin acts quickly (in 10 to 30 minutes). It peaks in about 1 to 2 hours after injection and lasts between 2 and 4 hours. Short-acting insulin usually reaches the bloodstream within 30 minutes after injection, peaks between 2 and 3 hours after injection and lasts for around 3 to 6 hours.

## Key Points

- Rapid-acting insulin works as quickly as 10 minutes. Short-acting insulin works as quickly as 30 minutes.
- You inject rapid-acting insulin up to 15 minutes before a meal, or short-acting insulin 30 minutes before a meal, which is why they're often called "mealtime insulins."
- Rapid-acting and short-acting insulin work by replacing what your body makes—or should make—naturally.

## What You Need to Know

- Rapid-acting insulin starts to drop your blood glucose level in as soon as 10 minutes, but if your blood glucose is high, you may want to wait longer before eating.
- Rapid-acting insulin is often called, "mealtime insulin" because you take it up to 15 minutes before meals, during, or slightly after a meal.
- Rapid-acting insulin helps manage blood glucose levels after you eat a meal or a snack.
- You may hear your healthcare professional refer to "peak time." This is when the insulin is working its hardest to lower your blood glucose.

**Helpful Tip:**

You may need to take a long-acting insulin along with the mealtime insulin your healthcare professional has prescribed. A long-acting insulin helps control your blood glucose levels between meals and during the night and is taken 1 to 2 times a day.

**Myths vs Facts**

**Myth:** If you need to take insulin, it means you've done something wrong managing your diabetes.

**Fact:** Needing to take insulin doesn't mean you've done something wrong. It just means your body needs extra help in managing your blood glucose levels.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will make sure to take my rapid-acting insulin up to 15 minutes before a meal or as directed by my healthcare professional.

**Why It Matters**  
While rapid-acting insulin starts to work as soon as 10 minutes, if your blood glucose is high, you may want to wait a little longer to eat after injecting.
- 2 Action**  
I will not blame myself for needing to take insulin as it doesn't mean I did anything wrong.

**Why It Matters**  
Needing to take insulin simply means your body needs a little extra help managing your blood glucose levels for good health. It doesn't mean you failed or did anything wrong.
- 3 Action**  
I will talk with my healthcare professional to see if a mealtime insulin is right for me.

**Why It Matters**  
Your healthcare professional can best determine if a particular type of medicine is right for you.

**Next Topic** 

▶ **Fitting Injections Into Your Daily Routine**

▶ **Mealtime Insulin**

▶ **Long-Acting Insulin**

▶ **Technology and Managing Diabetes**

# Technology and Managing Diabetes

There are all sorts of technologies that help make managing your diabetes easier than ever before. In this module, you'll learn about all the options that are available so you can determine which, if any, work best for you. As always, if you have any questions and want to know if a certain device will fit your needs, talk with your diabetes care team.

## Key Points

Diabetes technology and devices can provide many benefits to certain people. However, not everyone would benefit from using these tools. Sometimes they are covered by insurance and sometimes, they are not. Sometimes technology can make living with diabetes easier and improve overall diabetes management, but sometimes it will not. Learn what might be right for you and if it is worth the cost.

## What You Need to Know:

- **Continuous Glucose Monitoring (CGM)** uses a tiny sensor that is inserted under your skin on your stomach or arm to measure the glucose found in the fluid between your cells. Every few minutes, the sensor monitors your glucose and transmits the results to a monitor.
  - Some CGM devices send the information to another device, such as a reader, or to an app on your smartphone or other device. CGM devices can also be a part of an insulin pump.
  - CGM tracks your blood glucose levels all day and night, and lets you view them any time. You can track your blood glucose changes over a few hours or days to see trends that allow you to better balance your food, physical activity, and medicine.
- **Connected insulin pens, also known as smart insulin pens**, combine a reusable injector pen with a smartphone app to help you better manage your insulin delivery. In addition to calculating and tracking your insulin dose, the app provides reminders, alerts, and reports. There are a few pens to choose from. Talk to your healthcare professional about what would best meet your needs.
- **Insulin Pumps** are insulin-delivering devices that are roughly the size of a deck of cards. They can be worn on the skin or a belt or kept in a pocket. They connect to narrow, flexible plastic tubing that ends with a needle that is inserted just under the skin. You set the pump to give you a steady amount of insulin continuously throughout the day. Pumps release several units of insulin at a time at meals and at times when blood glucose is too high. This is based on the programming done by the user.
- **Artificial Pancreas Device System** uses a continuous glucose monitor (CGM), an insulin infusion pump, and a program stored on the pump or a smartphone. It is sometimes referred to as a "closed-loop" system or "automated insulin delivery" system.
  - There are several different types of Artificial Pancreas Device Systems. These systems mimic the way a healthy pancreas would regulate blood glucose levels.
  - An Artificial Pancreas Device System does more than just monitor your blood glucose levels, it also automatically adjusts how much insulin is delivered with little or no input from you. For more information, discuss with your healthcare professional as some of these systems are still being researched.

### Helpful Tip:

With so many options to choose from, make time to talk with your diabetes care team about which option(s) might be best for you.

## Myths vs Facts

**Myth:** If I start with insulin injections, I have to stay with insulin injections.

**Fact:** If you don't like injections, talk with your healthcare professional about switching to an insulin pump. It might make it easier for you to manage your diabetes.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 **Action**  
I will talk with my diabetes care team about the new technologies to help manage my diabetes.

### Why It Matters

Your diabetes care team can help you decide which of the new technologies might be better suited to your individual needs.

- 2 **Action**  
If I switch to a new technology, I will continue to monitor and record my blood glucose levels.

### Why It Matters

Monitoring your blood glucose levels helps you and your healthcare professional decide if your diabetes medicine, insulin, or any lifestyle changes need to be made.

- 3 **Action**  
If I switch to a continuous glucose monitor, I will still keep a traditional meter handy as a backup or if my readings seem off.

### Why It Matters

If you feel a doesn't match the blood glucose reading on your CGM, having a backup meter is always a good idea.

Next Topic

- Beyond the Basics of Type 1 Diabetes
- Coping with Stress
- Cardiovascular Risk and Protection
- Highs and Lows
- Changing Behavior
- Identifying Your Goals and Motivation
- Checking Blood Glucose and A1C
- Knowing Your Numbers

# Beyond the Basics of Type 1 Diabetes

The more you know about type 1 diabetes, the more it can be managed. As you have probably already learned, the more you know about your condition—any condition—the more empowered and in charge you feel. In this topic, you and your caregiver will learn some of the basics of type 1 diabetes and its management. As always, you're encouraged to reach out to your diabetes care team with any questions you may have.

## Key Points

- Living with type 1 diabetes presents different challenges at different stages in life. They all can be better managed by talking with your diabetes care team. These experts can provide you with all sorts of helpful tips for you, your child, or family member living with type 1 diabetes.
- No matter where you are—at home, work, or at school, it helps to be prepared. Having your tools on hand (monitors and medicine supplies) and snacks or glucose tablets ready for low blood glucose episodes is important.
- Remember: you are not alone. About 64,000 people (ages 0-64 years) are diagnosed with type 1 diabetes each year in the United States.

## What You Need to Know:

- During the period of 2001-2015, about 64,000 people ages 0-64 years in the United States were diagnosed with type 1 diabetes each year. It is very common in children and adolescents but may affect people of any age. It may make you feel more comfortable knowing that you are not alone.
- Managing diabetes will become a part of your daily routine if it hasn't already. You need to monitor your blood glucose and take your insulin every day. It is recommended that most people with type 1 diabetes use an insulin pump and a continuous glucose monitor (CGM) for the most advanced treatment methods.
- Healthy eating is as much a part of your diabetes care as taking medicine. It's important to understand that food affects you and your body a little differently than it affects people who don't have diabetes. Packing a lunch to take to school or work might be a helpful way to stay on track.
- Carrying around these supplies in a backpack or keeping extras in the office or at school may be helpful.
  - Snacks, glucose tablets, or fruit juice for low blood glucose
  - Back-up supplies for blood glucose monitoring or taking medicines (whether it is for the pump, CGM, meter or insulin injection supplies).
  - And don't forget to wear a medical ID necklace, bracelet, smart watch sleeve, or ankle bracelet
- Gatherings at another home, such as a dinner party or a sleepover can present particular challenges. If you're the caregiver, reach out to the host. If you are checking for your child, advise them on meal requirements, insulin injections, and what to do in case of a low blood glucose event. Reach out to your diabetes care team for suggestions.
- If you're the caregiver for a teenager or young adult, be sure to keep the lines of communication open. Find out about the pressures they may be facing. In time, you can help come up with solutions, but simply listening is a great first step.
- Dating with diabetes is another subject to discuss and prepare for with your young adult child. There's no one-size-fits-all solution, but here are some ideas that may help:
  - If their date knows that they're going to be dining with someone who has diabetes, it may be easier to stick with a healthy meal plan.
  - Talk with your diabetes care team about having a plan to deal with low blood glucose, monitoring blood glucose, or taking an injection while on a date.
  - Checking blood glucose before going out and having emergency snacks or glucose tablets on hand are also important.
  - If the person with diabetes is of drinking age, remind them that alcohol can quickly affect blood glucose. This can leave them at risk for low or high blood glucose. Many people with type 1 diabetes choose to avoid alcohol entirely for this reason.
- Finding healthy ways to manage stress is another important part of diabetes self-management. Discuss coping strategies with your son or daughter so that they feel prepared.
- If you're managing a career along with type 1 diabetes, you should feel comfortable asking your employer for special accommodations if you need them. Breaks to check blood glucose levels, eat a snack, take medicine, or rest until blood glucose levels become normal are reasonable according to the American Diabetes Association. The same is true for being able to keep your diabetes supplies and food nearby, having a private area in which to test your blood glucose, or take your insulin are also reasonable.

## Helpful Tip:

Communication is the key to handling most difficulties that we face. If you're the caregiver of someone with type 1 diabetes, be sure to listen to their concerns. You may not have all the answers, but knowing that they have you on their side to help find solutions may be enough of a comfort.

## Myths vs Facts

**Myth:** Growing up with type 1 diabetes means I'm going to miss out on having a normal childhood.

**Fact:** Not at all! Participating in the same activities as others might just take a little extra preparation and listening to your body. Talk with your healthcare professional about any questions you may have.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- Action**  
This week, I will pack a healthy lunch for me or my child.

### Why It Matters

Eating the right foods and the right portions of foods is as important as taking your medicine. It can help keep your blood glucose numbers in target.

- Action**  
I will keep my family up to date with how I am managing my blood glucose and suggest ways they can help.

### Why It Matters

The more your family knows, the more they can help.

- Action**  
I will identify a place at work or school where I feel comfortable checking my blood glucose and taking my insulin.

### Why It Matters

Finding a comfortable place to care for your diabetes will help you keep on track.

## Next Topic

- [▶ Beyond the Basics of Type 1 Diabetes](#)
- [▶ Coping with Stress](#)
- [▶ Cardiovascular Risk and Protection](#)
- [▶ Highs and Lows](#)
- [▶ Changing Behavior](#)
- [▶ Identifying Your Goals and Motivation](#)
- [▶ Checking Blood Glucose and A1C](#)
- [▶ Knowing Your Numbers](#)

# Cardiovascular Risk and Protection

People with diabetes need to take extra care to manage their risk for heart disease compared to those who don't have diabetes. That's because people with diabetes are twice as likely to have a heart attack or stroke as those who don't have diabetes. In this module you'll learn ways to make protecting your heart a part of your everyday life.

## Key Points

- Diabetes puts you at an increased risk for a heart attack or stroke.
- Eating healthy, staying physically active, and managing your ABC's (A1C, blood pressure, and cholesterol) can reduce your risk of heart disease and stroke.
- Several diabetes medicines have been shown to be beneficial in reducing risks for heart disease.
- Regular checkups are a smart way to care for your heart. This typically includes having your A1C checked, a thorough eye exam, a foot exam, and making sure that your cholesterol levels and blood pressure are where they should be for you.

## What You Need to Know:

- Having diabetes puts you at increased risk for having a heart attack or stroke. That's because high blood glucose levels over time can damage your blood vessels and nerves. Plus, many people with diabetes also have high blood pressure, high cholesterol, and are overweight—3 things that increase your chances of getting heart disease.
- Your risk of heart disease and stroke is higher the longer you live with diabetes.
- There are many things you can do to decrease your risk of heart disease, including: eating less saturated fat and more high-fiber foods, such as fruits and vegetables, being physically active on a regular basis, and keeping your A1C in target range.
- Managing blood pressure is very important to reduce your risk of heart disease. For most, it means keeping blood pressure below 130/80 mmHg. For some who are at higher risk, the goals may be lower.
- Talk with your healthcare professional and schedule regular checkups. This can help you manage your blood glucose levels and also lower your risk of heart disease.
- Here are some other ways to care for your heart:
  - **Every 3 to 6 months** have your A1C and blood pressure checked by your healthcare professional.
  - **Once a year**, have the following blood tests: triglycerides and cholesterol (especially HDL and LDL) to check the health of your blood vessels and creatinine to check kidney function. In addition, have a thorough eye exam, which includes getting your eyes dilated so your doctor can see your optic nerve. You should also have a complete foot exam and get a flu shot and other recommended vaccines.

### Helpful Tip:

Managing your weight is very important. In fact, for people with overweight or obesity, losing about 5-7% of your body weight can help. If you need help learning how to eat healthy portions, check out the Diabetes Plate Method module for details.

### Myths vs Facts

**Myth:** If I have diabetes, there is nothing I can do to manage my risk for heart attack or stroke.

**Fact:** You can do many things to reduce your risk, including eating healthy foods, maintaining a healthy weight, exercising regularly, and taking your diabetes medicine(s) as prescribed.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

**1 Action**  
I will follow the recommendations for healthy eating and monitor my food portions to maintain a healthy weight.

#### Why It Matters

Managing your weight can help you better manage your blood glucose levels and your heart health.

**2 Action**  
I will talk with my healthcare professional about having routine checkups to reduce my risk of heart disease.

#### Why It Matters

Routine checkups can help alert your healthcare professional to changes in your blood glucose, cholesterol, weight, and other important factors that can impact your heart health.

**3 Action**  
I will be sure to schedule annual eye and foot exams.

#### Why It Matters

Your eyes and feet can be affected by diabetes, which is why it is so important to have them checked by a healthcare professional at least once a year.

**Next Topic**

- [▶ Beyond the Basics of Type 1 Diabetes](#)
- [▶ Coping with Stress](#)
- [▶ Cardiovascular Risk and Protection](#)
- [▶ Highs and Lows](#)
- [▶ Changing Behavior](#)
- [▶ Identifying Your Goals and Motivation](#)
- [▶ Checking Blood Glucose and A1C](#)
- [▶ Knowing Your Numbers](#)

# Changing Behavior

Now that you're living with diabetes, chances are your diabetes care team has recommended that you change a few of your behaviors. You were probably told to become more active. Learning how to check your blood glucose, take medicines, or measure foods are other changes in behavior healthcare professionals often recommend.

Changing your behavior, even slightly, has the ability to change the course of your diabetes for the better. Even small changes can provide you with positive health benefits. Let's explore what some changes might be and how they may help.

## Key Points

- Changing or starting new behaviors isn't always easy, but with the right support—you can do it!
- Consider how these changes—even the small ones—may make a big difference in your health to help keep you motivated.
- Plan ahead and prepare for situations that can get in your way of changing your behavior by thinking of ways to overcome them.

## What You Need to Know:

- Changing behaviors may be a challenge. This is why it is often a good first step to think about some of the changes you need to make and how they can help.
- Breaking down the behavior you want to change into smaller steps will make it easier. Be as specific and realistic as possible. Instead of thinking about something broad and vague such as exercising more, break it down into each of the steps you might need to take to get to where you want to be, such as: I will get new sneakers or I will walk for 10 minutes today.
- Situations like holiday dinners or overnight trips might make it trickier to follow your meal plan. Making a plan that includes tips for handling things in advance is often helpful.
- Reach out to your family, friends, and diabetes care team for support. They can help motivate you and encourage healthy changes.
- Plan ahead and think about the things that trip you up and how you can either avoid or overcome them.

### Helpful Tip:

Focus on the benefits of changing unhealthy behaviors. When you see the benefits, you may see fewer obstacles. Don't try to change too many behaviors at once. That can be overwhelming and set you up for failure. You may even want your family members to join you as everyone can benefit from these healthy changes. Make a list of the behaviors you need and want to change, and try to tackle one each week.

### Myths vs Facts

- Myth:** Knowing that you need to make healthy changes should be enough to get you started.
- Fact:** Not true. It helps if you first understand how these changes can help improve your health. Seeing the big picture can be very motivating. Then, think of ways to make these changes doable.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will pick 1 health change that I can try today.

**Why It Matters**  
Starting slow may increase your chances of success.
- 2 Action**  
I will identify 1 situation that gets in the way of my diabetes care.

**Why It Matters**  
Anticipating or avoiding obstacles that get in the way of keeping you on track can help you be better prepared for them.
- 3 Action**  
I will tell the people on my diabetes care team what I need from them.

**Why It Matters**  
The more support you can get in managing your diabetes, the easier it may be to manage it.

**Next Topic**

▶ [Beyond the Basics of Type 1 Diabetes](#)

▶ [Coping with Stress](#)

▶ [Cardiovascular Risk and Protection](#)

▶ [Highs and Lows](#)

▶ [Changing Behavior](#)

▶ [Identifying Your Goals and Motivation](#)

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▶ [Knowing Your Numbers](#)

# Checking Blood Glucose and A1C

An important part of caring for your diabetes is checking your blood sugar (or glucose). Glucose, which is the main sugar found in your blood, comes directly from the foods that you eat and is your body's energy source. It is also important to know the results of your A1C blood test. Your A1C test results can give you a picture of where your blood glucose levels—on average—have been over the past 2 to 3 months.

Keeping track of both your blood glucose and A1C is called, “monitoring.” Monitoring is key because it gives you the information you need to know where your blood glucose levels are and where they might be headed. It is a good indicator for how the diabetes treatment plan is working. It’s like a GPS for your diabetes management. This information will help guide you and your diabetes care team to better customize your diabetes care plan.

## Key Points

- Monitoring your blood glucose—at home with a meter and at the office of your healthcare professional to check your A1C—is an important part of managing your diabetes.
- Blood glucose can also be monitored with a device called a continuous glucose monitor (CGM) that tracks blood glucose levels all day and night. It works with a tiny sensor put under the skin usually on your belly or arm.
- Your blood glucose levels provide important information to your diabetes care team that may require adjustments to your current care plan.
- Studies show that keeping your A1C below 7% may reduce your risk of some diabetes-related concerns, such as eye, kidney, or nerve problems.

## What You Need to Know:

- You may feel fine even when your blood glucose levels are above target. This is why monitoring your blood glucose is so important.
- There are 2 ways to monitor your blood glucose:
  - Having an A1C blood test at your healthcare professional's office
    - These results tell you an average of how your blood glucose levels have been during the past 2 to 3 months.
  - Checking your blood glucose at home using a meter or continuous glucose monitor (CGM) on a daily basis. A CGM tells you the amount of time your blood glucose is within the target range set by your diabetes care team. Since everyone is different, your healthcare professional may specify that you check before or after meals.
    - Be sure to keep track of your blood glucose results and share them with your healthcare professional at your visits. The patterns of highs and lows can help guide any changes in your medicine that need to be made.
    - Ask your healthcare professional to recommend a meter or CGM that is covered by your health plan. This may save you money on test strips and lancets.
- Your diabetes care team will use your blood glucose results to make any changes to your care plan, including your medicines, eating plan, and physical activities.
- For most people, when you wake up and before meals, your blood glucose levels should be between 80 mg/dL and 130 mg/dL. One to 2 hours after meals, your levels should be less than 180 mg/dL. Your recommended targets may be different.
- Keeping your A1C levels below 7% has been shown to help reduce your risk of some common diabetes-related problems (eye, nerve, or kidney problems). It can also impact your cardiovascular system, foot health, and even your dental health.

## Helpful Tip:

Ask your healthcare professional what your target blood glucose and A1C numbers should be. This may help you stay on track.

## Myths vs Facts

**Myth:** Having high blood glucose levels is bad.

**Fact:** Your blood glucose levels aren't good or bad. They simply provide information about how well your diabetes care plan is working. Most people will have blood glucose that falls above or below range some of the time. The goal is to increase the amount of time it falls within the goal range.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
At my next visit, I will ask my healthcare professional what my target blood glucose range should be.

### Why It Matters

Knowing your blood glucose targets may help you know if you need to make changes to your diabetes care plan.

- 2 Action**  
I will ask my health insurance company what their “preferred” meter or CGM is.

### Why It Matters

Using a meter that is covered by your insurance may help you save money on testing supplies.

- 3 Action**  
Every day this week, I will check and log my blood glucose levels as often as my healthcare professional recommends.

### Why It Matters

Checking your blood glucose levels lets you know how well your diabetes is being managed.

**Next Topic**

- [▶ Beyond the Basics of Type 1 Diabetes](#)
- [▶ Coping with Stress](#)
- [▶ Cardiovascular Risk and Protection](#)
- [▶ Highs and Lows](#)
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# Coping with Stress

Most people have stress in their lives. The challenges that you and your family face living with diabetes can add to that stress. This stress can sometimes lead to depression, which is something that people with diabetes may be at higher risk for developing.

Additionally, coping with the unique stress that COVID-19 brings (such as isolation and added concerns about one's health) can add to these stress levels. Fortunately, there are things you can do to better handle how you cope. This topic will educate you about how stress affects your health and offer tips for managing it better.

## Key Points

- Stress can elevate your blood glucose levels. Sometimes, it can lower it and result in low blood glucose—if you're too stressed to eat than skip a meal.
- Find ways to cope with stress, whether it be leaning on your network of supportive family and friends, going for a walk, doing yoga, or reading a relaxing book.
- It's worth noting some of the common symptoms of depression, which include loss of interest or pleasure in doing things you typically enjoy, trouble sleeping or sleeping more than usual, and eating more or less than usual. If you have any of these symptoms or notice them in a friend or family member, talk with your healthcare professional. There are numerous things one can do to help cope with depression and you are not alone.

## What You Need to Know:

- Stress may directly affect your blood glucose levels. It can either raise or lower blood glucose levels. Here's why:
  - When you're in a stressful situation—maybe an argument with a friend—stress hormones, such as adrenaline, are released. This causes blood glucose levels to rise.
- Feeling isolated or “different” because of your diabetes can be stressful, too. Sometimes, this type of stress may make you want to skip a meal, but don't. A skipped meal could lead to low blood glucose.
- The day-to-day management of diabetes can add to your stress. Remembering to take your medicine(s), checking your blood glucose levels, eating healthy, and being active can add up. Predicting obstacles and planning ahead can help you feel like you are better able to manage things.
- Find healthy ways to cope with stress, such as deep breathing, meditation, or even taking a long walk with a friend.
- Check blood glucose more often when you are feeling stressed and see how it affects you.

### Helpful Tip:

Getting support from your friends, family, an online support group, or your diabetes care team can help you cope with stress. There may be times when it is helpful to talk with a mental health professional, especially if you're experiencing signs of depression. Ask your healthcare professional for a referral if you need one and remember that you are not alone. Your mental health is as important as your physical health.

### Myths vs Facts

- Myth:** If I were stronger, I would be able to handle stress better.
- Fact:** The only kind of strength that helps with the management of stress is a strong support system. Don't forget to reach out to family, friends, or your diabetes care group for help in managing stress.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will identify what life stresses make it harder for me to manage my diabetes.

**Why It Matters**  
Being aware of how life gets in the way may help you prepare for it and possibly even change it.
- 2 Action**  
For the next week, I will focus on how to make the hardest part of managing diabetes easier.

**Why It Matters**  
You can reduce stress by talking with your diabetes care team or others in your support system. They may be able to help you find ways to change the way you look at stressful situations or change the environment that's causing stress.
- 3 Action**  
This week, I will try 1 strategy to help manage stress—taking a walk, spending time with friends, watching a movie.

**Why It Matters**  
Stress is a fact of life. Having tools to help manage stress may help.

**Next Topic**

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- [▶ Coping with Stress](#)
- [▶ Cardiovascular Risk and Protection](#)
- [▶ Highs and Lows](#)
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# Highs and Lows

Understanding what causes high and low blood glucose is an important part of taking care of type 1 diabetes. In this topic, we'll learn the causes of high and low blood glucose, how to recognize and treat its symptoms, and how to look for patterns. It's important to keep your numbers within the range your care team has set for you.

## Key Points

- Knowing your target range for your blood glucose is important, so be sure to ask your healthcare professional.
- Keep track of your blood glucose levels and see if there are patterns. Were you more active when your blood glucose levels changed? Were you sick or stressed? All these things can impact your blood glucose levels. Share your tracker with your healthcare professional at your next visit.
- Having snacks available if your blood glucose drops is an important part of self-care. Be sure to let your family, friends, and co-workers know the symptoms of low blood glucose and where the snacks to help treat this are located.

## What You Need to Know:

- Your blood glucose numbers provide important information about how well your diabetes treatment plan is working. Your diabetes care team will use this information to determine if your care plan is working or if it needs to be changed.
- Everyone's blood glucose goals are different and are determined by your healthcare professional. However, for most non-pregnant people with type 1 diabetes, the blood glucose targets are:
  - 80 mg/dL to 130 mg/dL when you wake up and before eating or drinking. This is often called fasting plasma glucose or FPG.
  - Less than 180 mg/dL is the typical target 1 to 2 hours after eating or drinking. This is often called postprandial glucose or PPG.
- Low blood glucose is below 70 mg/dL at any time.
- Common symptoms of **low** blood glucose are feeling shaky, dizzy, sweaty, hungry, angry or irritable, having a headache or difficulty concentrating, and being confused.
  - Tips for managing low blood glucose:
    - Have a snack that includes 15 grams of carbs, such as ½ cup of regular fruit juice or regular soda, 4 glucose tablets, and candies that can be quickly chewed, such as 7 gummies.
    - Keep these snacks handy in your car, office desk, and nightstand. Let your family, friends, and co-workers know how to recognize the signs and symptoms of low blood glucose and what to give you if you are low.
    - Fifteen minutes after having a snack, check your blood glucose again. If your blood glucose is still low, have another small snack. Once your blood glucose returns to target range, have a meal to help keep your blood glucose from becoming low again.
- Common symptoms of **high** blood glucose are increased thirst, increased urination, dry mouth or dry skin, tiredness or fatigue, blurred vision, more frequent infections, such as yeast or urinary tract infections, slow-healing cuts and sores, or unexpected weight loss.
  - Tips for managing high blood glucose:
    - If you have signs of high blood glucose, be sure to check more often and take your insulin as recommended. The non-insulin medications that you take can also have an impact on your blood glucose. As always, ask your diabetes care team if you have any questions.
    - Be sure to check your blood glucose before, after, and while playing sports or other activities as adrenaline may cause your sugar levels to rise.
- Keep track of your blood glucose levels and try to determine the cause of your highs and lows. Use one of the many apps to keep track of your numbers or [keep a written record](#). Bring this information to your next office visit to discuss with your healthcare professional.

### Helpful Tip:

If you or your loved one is experiencing any of the symptoms described above, check your blood glucose. It may mean that it's too high or too low. Then, follow the suggestions for managing your blood glucose.

### Myths vs Facts

**Myth:** There's nothing I can do about high or low blood glucose.

**Fact:** There are many things you can do to remedy blood glucose levels that are out of your target range. Follow the tips we described above and talk with your diabetes care team for additional tips.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will work with my diabetes care team to identify my blood glucose goals.

**Why It Matters**  
Blood glucose goals vary from person to person. Knowing what yours are is important, so be sure to have this conversation with your diabetes care team.
- 2 Action**  
I will keep track of my blood glucose levels so that I can look for patterns and share them with my diabetes care team.

**Why It Matters**  
Recording your blood glucose numbers may help you become more aware of patterns. Try to determine what causes your highs and lows and discuss this with your diabetes care team.
- 3 Action**  
I will call my healthcare professional to let them know if my blood glucose goes below 70 mg/dL.

**Why It Matters**  
Even 1 low reading may require a change in your medicine. This is why it's important to discuss this with your healthcare professional.

Next Topic 

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# Identifying Your Goals and Motivation

Your diabetes is different from anyone else's diabetes. You have your own reasons for staying motivated and following your diabetes care plan. You also have your own goals. Once you're clear about what your goals and motivations are, it's easier to identify the action steps to achieve those goals, take charge and better manage living with diabetes. Be sure to ask your family and friends for their support. This can make things much easier for you.

## Key Points

- Know your goals. These are the big-picture reasons why striving for better health is important to you.
- Identify specific action steps you can take that will help you reach your goals. Be as specific and realistic as possible.
- Understanding what motivates you can actually help you stay motivated. Jot down some of your motivations for following your diabetes care plan. You may want to put this list somewhere visible to help keep you on track.
- Think about the obstacles you face and make a plan for handling each one. Feeling prepared can be very empowering.

## What You Need to Know:

Here are some tips for getting and keeping you motivated:

- Everyone is motivated by different things. Here are a few goals that might also work for you:
  - I want to be healthy so that I can be there for my family.
  - I know someone who had problems as a result of not taking care of their diabetes. I don't want that to happen to me.
  - I want to feel better and have more energy.
- Think about writing down your main motivations and putting them someplace where you'll see them every day.

Here are a few tips for setting your diabetes care action steps:

- Start by talking with your healthcare professional and partner with them to set specific and realistic things you can do.
- Make your action steps specific. For example, "I will check my blood glucose first thing every morning."
- Set action steps that are realistic. If you find it difficult to be active once a week, it may be unrealistic to think you can be active every day. Start with small steps and add to them little by little. Be sure to take the time to celebrate your accomplishments. This can help you stay motivated.

### Helpful Tip:

Write down your goals *and* your motivations. Use a magnet to place them on your refrigerator. This can help ensure that you see it every day—a few times each day!

### Myths vs Facts

**Myth:** I have a reason to feel motivated today and will use it to stay motivated in the future, too.

**Fact:** Just as your diabetes treatment goals may change with time, the same is true for your reasons to stay motivated. Review and update your goals from time to time.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will write down my number 1 goal or motivation for making healthy changes.

**Why It Matters**  
You may be more likely to succeed if you figure out what motivates you. Remind yourself of this motivation when things get tough.
- 2 Action**  
For the next week, I will set a realistic action step I can manage to add to my exercise routine.

**Why It Matters**  
Physical activity and exercise help your body become more sensitive to your own insulin and use it more effectively. Before starting any exercise plan, be sure to talk with your healthcare professional first.
- 3 Action**  
I will reward myself for sticking to my action steps and achieving them this week.

**Why It Matters**  
Learning how to stick to your action steps will teach you what may help you maintain healthy changes long term and reach your goals.

**Next Topic**

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# Knowing Numbers

As you may already know, people with type 1 diabetes need to know their numbers to better understand how well their condition is being managed. It also helps to understand the many terms your diabetes care team will be using when they discuss your diabetes treatment plan with you. This learning module will help you do just that. The more you know, the better you can partner with your diabetes care team to keep your numbers in their target range.

## Key Points

- There are various blood tests your healthcare professional will want to do in order to learn how well your blood glucose is being managed, what your blood glucose levels are when you wake up, and how it differs 1 to 2 hours after you eat or drink.
- Checking to see how well your kidneys are functioning and determining the health of your eyes are also important.
- Your healthcare professional will determine how often these tests are needed for you or your child.

## What You Need to Know:

- **A1C** measures how well your blood glucose levels have been controlled over the past 2 to 3 months. It is measured by a blood test that is done 2 to 4 times a year. For most people, keeping your A1C less than 7% is the goal. Your healthcare professional will tell you what is best for you or your loved one.
- **Fasting Plasma Glucose (FPG)** is the measurement of your blood glucose levels when fasting for at least 8 hours, like when you first wake up in the morning. For most people, the FPG goal is between 80 mg/dL and 130 mg/dL. Your healthcare professional may set different goals for you.
- **Postprandial Glucose (PPG)** is the measurement of your blood glucose levels 1 to 2 hours after you eat or drink. It is often measured several times a day but may vary as your healthcare professional recommends. For most people, the PPG goal is less than 180 mg/dL.
- **Time in Range (TIR)** is the percent of time blood glucose falls within a range (usually between 70 and 180 mg/dL). For most people, the goal is to have their TIR be at least 70%.
- **Ketone test** measures the presence of ketones found in the urine or blood. Ketones are acids that can build up when the body doesn't have enough insulin to move blood glucose into your cells. Whenever your blood glucose goes above 250 mg/dL twice in a row, your doctor may recommend your ketone levels be checked. The goal is to have a negative result.
- **Blood Pressure** measures the pressure against the walls of your blood vessels. It should be measured at every medical visit or at least 2 to 4 times a year. An elevated blood pressure (above 130/80 mmHG) can indicate a higher risk for heart and blood vessel problems.
- **Cholesterol:** An annual check of your LDL cholesterol gives a better picture of the health of your blood vessels. Keeping cholesterol in the target range reduces the risk for heart and blood vessel problems.
- **Estimated glomerular filtration rate (eGFR)** informs your healthcare professional of how well your kidneys are working. This test is often done once a year, but may be more frequent depending on what your healthcare professional decides is best for you. The goal is 60 mL/min or higher.
- Your healthcare professional may also want to see in the back of your eye, which requires them to put drops in your eyes to dilate or open them up even more. This is often done once a year and lets your healthcare professional know if there are any signs of eye problems.

### Helpful Tip:

Keep track of all your numbers. Write them down and look to see if you notice any patterns. Be sure to let your healthcare professional know if your blood glucose levels become too high or low, and if ketones are present.

### Myths vs Facts

- Myth:** Everyone with type 1 diabetes gets tested on the same schedule.
- Fact:** Not true. The frequency of your tests may be different than someone else. Your healthcare professional will determine what is best for you.

## Nice work! You've finished reading through the information on this topic.

Now you're ready to act and start incorporating these new healthy habits into your life. This will help you practice what you've learned and build the skills you need to better manage your diabetes. Here are a few suggested actions:

- 1 Action**  
I will record the results of my A1C tests and make sure I know what they mean.

**Why It Matters**  
Keeping track of how well your blood glucose levels are being managed over the last 2 or 3 months gives you and your diabetes care team important information to decide if your treatment plan needs to change.
- 2 Action**  
I will check my blood glucose 2 hours after eating.

**Why It Matters**  
An after-meal reading over 180 mg/dL means you may need to alter your diabetes care plan.
- 3 Action**  
I will ask my healthcare professional about any test results I'm not familiar with so that I can get a better understanding of how my overall diabetes management plan is going.

**Why It Matters**  
Diabetes is not just about sugar. It's important to pay attention to the numbers that indicate how your blood vessels (especially in the heart and kidneys) are working as well. Being prepared may catch ketones before they can do any damage.

Next Topic